

THE USE OF AVERAGE WEIGHT TO ESTIMATE THE LEVEL OF HARVEST OF
NON-LOCAL SOCKEYE SALMON WITHIN THE KODIAK MANAGEMENT AREA,
DURING JULY 6-25, 1983-1994

By

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INTRODUCTION

Commercial salmon fishing occurs throughout the Kodiak Management Area (KMA), which encompasses the Kodiak Archipelago and the south side of the Alaska Peninsula from Cape Douglas south to Kilikok Rocks (Figure 1). Approximately 387 purse seine, 190 set gillnet, and 36 beach seine limited entry permit holders participate in the Kodiak commercial salmon fishery (K. Iverson, Alaska Department of Fish and Game, Juneau, personal communication). Seventy-six percent of the permit holders are Alaska residents, with 80% of the residents residing on Kodiak Island, including six Native villages.

For the KMA, salmon fishing time is regulated almost entirely on the basis of local stock abundance. Most of the more than 450 salmon streams in the KMA are pink salmon producing systems. About 39 streams support sockeye runs. The major sockeye systems are Karluk, Ayakulik, Frazer, and Upper Station. The KMA sockeye run begins in late May and ends in September (Barrett and Nelson 1994). Typically, peak abundance of KMA sockeye stocks occurs in both June and August. During July, most of the sockeye runs are in low abundance, excluding the Ayakulik and Saltery stocks and a few others. Within the KMA, July fishing time is primarily regulated on local pink and early run chum salmon abundance (ADF&G 1994). There are exceptions however, particularly on the southwest and southern ends of Kodiak Island where local sockeye run strength mainly dictates July fishing openings and closures.

Based on historic tagging studies and other work (such as run timing models), Upper Cook Inlet (UCI) sockeye salmon are known to be present within KMA waters during July and subsequently contribute to the fishery (Bevan 1948, 1949; Barrett and Swanton 1992). In March 1990, the State Board of Fisheries (BOF) established the North Shelikof Strait Management Plan which restricted the sockeye catch from July 6-25. This plan allows for a regulated incidental harvest of UCI sockeye, while managing for local stocks (ADF&G 1994). During the March 1994 BOF meeting, it was recognized that UCI bound sockeye were being harvested in areas outside the North Shelikof Strait Area.

For the March 1994 meeting, Westward Region staff attempted to quantify the 1983-1993 harvest of non-local sockeye salmon within selected areas of the KMA by using an average weight methodology (Vining and Barrett 1994). Concerns were voiced by BOF members, fishers (both Kodiak and UCI), and other ADF&G staff on this methodology and its subsequent results.

This report attempts to address and qualify the previous concerns and provide an estimate of the approximate contribution of non-local sockeye salmon to the KMA (excluding the Cape Igvak Section) harvest during the July 6-25 period in 1983 through 1994, using an average weight methodology similar to Vining and Barrett (1994). Differences in the present methodology versus those employed in the previous report include: a single criteria methodology for exclusion from estimation for a specific area and year; all area catches within the KMA are used (except the Cape Igvak Section); only one local stock average weight estimate per area and year is applied; only one estimated non-local average weight per year is used for estimating the point estimate; and a range on the estimate are presented instead of a confidence interval.

METHODS

Commercial catch data were obtained from the Alaska Department of Fish and Game (ADF&G) Commercial Fisheries Management and Development Division database in November 1994. These data were based on computer tabulations originating from individual sales receipts (fish tickets) given to fishers at the time of delivery. Each ticket provided the name and ADF&G number of the delivering vessel, the permit holder's name, the Commercial Fisheries Entry Commission (CFEC) license number, the location and date of the catch, the weight in pounds, and the number of each species delivered. Fish tickets and computer generated summaries were edited by ADF&G Kodiak and UCI salmon management staff for errors and omissions. We further edited the sockeye weight data by not using any average sockeye weight (per ticket) that was greater than 10 lbs or less than 3 lbs. That editing was done to ensure removal of potential gross entry errors.

The 12 year period of 1983 through 1994 was investigated, focusing on the harvest that occurred during the July 6th through 25th time period. However, the analysis did not include the 1989 season, as the KMA was virtually closed to commercial salmon fishing in that year due to the *M/V Exxon Valdez* oil spill. For each study year, all of the KMA was investigated, except for the Cape-Igvak Section (Fig 1). The Cape Igvak Section was not included because of a long-standing management plan for this area that addresses non-local sockeye harvest (ADF&G 1994). The July 6-25 period was chosen because: (1) previous BOF decisions dealing with the UCI sockeye bycatch concern have focused on this time interval (ADF&G 1989, 1993); and (2) the 1994 BOF appointed Cook Inlet/Kodiak Working Group meeting agreed during their October 27-28, 1994 that UCI sockeye are most vulnerable to harvest in KMA waters from July 6 through 25 (Larry Edfelt, Co-chairman Cook Inlet/Kodiak Working Group, Juneau, personal communication).

To estimate the proportion of non-local sockeye salmon in the commercial catch during the intercept period (July 6-25) for a specific area, the following equation was used:

$$\hat{P}_{NL} = \frac{\mu_{IP} - \hat{\mu}_{LOC}}{\hat{\mu}_{NL} - \hat{\mu}_{LOC}}, \quad (1)$$

where:

- \hat{P}_{NL} = the estimated proportion of non-local sockeye salmon in the catch,
- μ_{IP} = the average weight of sockeye salmon during the intercept period (July 6-25),
- $\hat{\mu}_{NL}$ = the estimated average weight of non-local sockeye salmon during the intercept period (July 6-25),
- $\hat{\mu}_{LOC}$ = the estimated average weight of local (Kodiak) sockeye salmon during the intercept period (July 6-25).

Equation (1) was derived from the following hypothesized relationship:

(2)

$$\mu_{IP} = \mu_{LOC} * (1 - p_{NL}) + \mu_{NL} * p_{NL},$$

where:

- μ_{IP} = the average weight of sockeye salmon caught during the intercept period,
- μ_{LOC} = the average weight of local (Kodiak) sockeye salmon during the intercept period,
- μ_{NL} = the average weight of non-local sockeye salmon during the intercept period,
- p_{NL} = the proportion of non-local salmon in the sockeye catch.

The average weight of sockeye salmon caught during the intercept period was considered a known quantity from the fish ticket data and was computed as the total weight caught divided by the total number caught, during the July 6-25 period. It was necessary, however, to estimate two parameters, average weight for non-local sockeye salmon, and average weight for local sockeye salmon.

To determine average weight for non-local sockeye salmon, UCI sockeye salmon harvest data between July 5 and August 8 was used, since most of the UCI run (approximately 99% by our estimation) occurs during that 5 week period. The combined drift and set gillnet catch data was used, since the two catches generally represent better than 70% of the UCI run. The non-local average weight was determined by dividing the total weight of the sockeye harvested in UCI (between July 5 and August 8) by the total number harvested.

The final estimate, the local average weight of sockeye salmon ($\hat{\mu}_{LOC}$) was estimated by dividing the combined June and August catch weights by the catch number:

$$\hat{\mu}_{LOC} = \frac{WT_{Jun} + WT_{Aug}}{n_{Jun} + n_{Aug}}, \quad (3)$$

where:

- WT_{Jun} = the June total catch in pounds,
- WT_{Aug} = the August total catch in pounds,
- n_{Jun} = the June total number caught,
- n_{Aug} = the August total number caught,
- $\hat{\mu}_{LOC}$ = the estimated local average weight for July 6-25.

If there was no fishery in either June or August, then the estimated local average weight for that year and area would be the average weight for the available month, when a fishery did occur.

It is important to note that the reliability of these proportion estimates rests on the validity of the following assumptions:

1. Average weight from the June and August Kodiak fishery provide an unbiased estimate of the average weight of local (Kodiak) sockeye salmon present July 6-25.

2. Species weight and count recorded on fish tickets are accurate, or at least no systematic bias in the data occurs.
3. Only UCI and Kodiak fish were present in the July 6-25 catch of sockeye salmon in the areas analyzed, while June and August sockeye salmon are strictly of Kodiak origin.
4. Average weight of fish caught in UCI drift and set gillnets were the same as the average weight of non-local sockeye salmon harvested in the KMA using seine and set gillnet gear.
5. Average weight of sockeye harvested in UCI were independent of average weight of sockeye harvested in Kodiak.

For assumptions 1, 3, 4, and 5, note that we are dealing with an average to represent the overall average weight of the local and non-local sockeye salmon. This procedure does not classify individual fish as to either "local" or "non-local"; but rather estimates the local and non-local contribution to the catch based on the characteristics of the overall catch. Under the stated assumptions, variability in individual weights of sockeye salmon can affect the precision of non-local proportion estimates but will have a negligible affect on biasing the proportion estimate.

Due to the large sample sizes used to estimate $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$, the variance of the estimator \hat{p}_{NL} , will generally be extremely small. Hence, most of the mean-squared-error of the estimator, \hat{p}_{NL} , is due to bias of the estimator rather than sampling error. The mean-squared-error of the estimator, \hat{p}_{NL} , is unknown, for assumptions cannot be assessed with available data. Model assumptions that could cause a bias in the estimator, \hat{p}_{NL} , include the assumptions that $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ are unbiased estimators. Because the mean-squared-error of the estimator \hat{p}_{NL} , is unknown, meaningful confidence intervals cannot be estimated. Sensitivity of the estimator, \hat{p}_{NL} , to the values of $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ can be assessed, however, by recomputing \hat{p}_{NL} using varying values of $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$. For the estimate of local average weight, we used the June and August separately to give two additional average weights for $\hat{\mu}_{LOC}$. For the estimate of non-local average weight, we used UCI catch and a combination of UCI catch and Chignik catch average weights. The exact procedures used for determining the different values of $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ to test for sensitivity are found in Appendix A.

Because the estimator can be sensitive to slight departures from model assumptions, in some cases, and there is natural fluctuation in the average weight of sockeye salmon, a criteria was developed to judge whether an estimate of \hat{p}_{NL} for a given area and year was too unreliable to be reported. It was determined (Appendix B) that \hat{p}_{NL} can produce unreliable estimates when the absolute difference between $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ was less than 0.5 lbs for a specific area and year. When the difference between $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ was less than 0.5 lbs, no estimate of \hat{p}_{NL} , or non-local and local catch estimates were made for a specific area and year, and the catch was labelled unassessed.

The estimated number of non-local sockeye salmon in the catch during the intercept period was derived by multiplying the total number of sockeye salmon caught (for a specific area, Appendix C) during July 6-25 by the estimated proportion of non-local sockeye salmon (for that specific area). If the proportion estimate was greater than one, then the proportion estimate would be

rounded to one. If the proportion estimate was less than zero, however, the proportion estimate would be rounded to zero. The local component was estimated by the total catch minus the non-local catch estimate. The relative lower and upper bounds, as determined by varying $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$ (Appendix A), for the proportion estimate, \hat{p}_{NL} , were also multiplied by the total number caught during July 6-25 for the specific area and year. This procedure (multiplying by the total number caught) was used to produce the relative minimum and maximum for the estimate on the number of non-local sockeye salmon harvested in a specific area and year.

RESULTS

The estimated proportion of non-local sockeye salmon varied extensively both between years and areas (Appendix D and F). The non-local proportion estimate of the catch in individual areas ranged from -111% to 404% (Appendix D). Out of 206 estimates, there were a total of 21 proportion estimates that were greater than one (100%). Those occurred when the July 6-25 catch average weight within a selected area of the KMA was greater than the estimated non-local average weight for that year. Out of the same 206 proportion estimates, there were a total of 38 proportion estimates that were less than zero (0%). Those occurred when the July 6-25 catch average weight within a selected area of the KMA was less than the estimated local average weight for that area. As discussed in the Methods Section, when calculating the estimated number of sockeye salmon assessed as non-local and local from the proportion estimate, all proportion values less than zero were rounded to zero and all proportion values greater than one were rounded to one.

As would be expected, the estimated number of sockeye salmon, and the associated relative ranges also varied extensively (Tables 1 and 2; Figure 2; Appendix D-G). The point estimate for the number of non-local sockeye salmon caught within an individual area for July 6-25 ranged from 0 to 345,337 fish (Appendix D). With the areas combined, the point estimate for the number of non-local sockeye salmon caught during July 6-25 ranged from 51,634 (1985) to 1,448,165 (1992) fish (Table 1; Figure 2). The relative minimum and maximum estimates of the non-local sockeye salmon caught during July 6-25 ranged from 1,600 (1984) to 1,497,744 (1992) fish (Table 2; Figure 3).

The point estimate for the number of local sockeye salmon caught in a specific area, during July 6-25, ranged from 0 to 363,007 fish (Appendix D). With the areas combined, the point estimate for the number of local sockeye salmon caught during July 6-25 ranged from 31,831 (1986) to 869,423 (1991) fish (Table 1; Figure 2). Considering the minimum and maximum estimates as well, the number of local sockeye salmon caught during July 6-25 ranged from 29,118 (1986) to 1,046,611 (1991) fish (Table 2; Figure 4).

There were a number of years where the number of areas labelled as unassessed (when no stock composition estimates were estimated) were quite high. For 1983, 1990, and 1992, there were no area/gear type estimates labelled unassessed, however in 1984 there were 13, and in 1986 there were 15 (out of 24, Appendix D). For the individual areas, the number of sockeye salmon caught, but unassessed ranged from 0 to 174,666 (Appendix D) fish. With the areas combined,

the unassessed component ranged from 0 (1983, 1990, 1992) to 612,480 (1986) fish (Table 1-2; Figure 2).

Dividing the harvest between non-local, local, and unassessed, then finding the relative proportion provided some interesting results (Table 3; Figure 5). The combined point estimate of the non-local proportion of the harvest estimated, during July 6-25, ranged from 10.6% (1986) to 76.2% (1992), while the local point estimate ranged from 4.4% (1986) to 80.0% (1994). The unassessed, however, had the greatest range of 0.0% (1983, 1990 and 1992) to 85.0% (1986). Including the relative minimum and maximum estimates, for July 6-25 harvest, the range for the non-local proportion ranged from 0.3% (1984) to 78.8% (1992), and the local proportion ranged from 4.0% (1986) to 89.4% (1994).

DISCUSSION

In Vining and Barrett (1994) a fairly thorough discussion was made of the problems with the model and the underlying assumptions. Due to biases caused by errors in assumptions, some of the errors being larger than initially expected in Vining and Barrett (1994), the results presented here should be viewed cautiously. This method provided a rough estimate (or index) of the stock composition of the July 6-25 sockeye harvest in the KMA. The rough estimates, therefore, only provided trend information for comparing changes between years and how the changes related to the UCI run (Table 4; Figures 6 and 7). Wide ranges on the estimates, however, indicate that for some years (e.g. 1990) this method yields little information (Table 2, Figures 3, 4, 6, and 7). Another area of unclear stock composition are for those years when the unassessed proportion is high (> 25% of the total catch) during July 6-25 period, for example in 1986 when it was 85.0% (Table 2).

When compared to other techniques, the average weight methodology varies (Table 5), it doesn't consistently estimate higher or lower when compared to other methodologies. In 1990, for example, the average weight methodology estimated a lower non-local sockeye component than did scale pattern analysis for the Southwest Afognak Section, and the relative minimum and maximum values did not encompass the previous estimated value. In 1988, however, the average weight methodology estimated a higher non-local sockeye component than did age-marker analysis for the North Shelikof Strait Area, and once again, the relative minimum and maximum values did not encompass the previous estimated value. No concrete rule or trend can be assessed due to varying results and few sample points to compare average weight estimates with other more accepted and rigorous techniques.

CONCLUSIONS

From the data, we can conclude that in addition to local sockeye salmon, Kodiak fishers also harvest non-local sockeye salmon. However, the study further shows, the fishers do not harvest non-local sockeye with the same frequency for all areas or from year-to-year within the KMA (Table 4; Figures 6 and 7; Appendices D-G).

The average weight methodology tended to have smaller relative ranges in years where there were large UCI runs, which is usually accompanied by a substantial size difference between UCI and Kodiak sockeye salmon average weights (Table 4; Figures 6 and 7; Appendix D and F). There was, however, some detectable harvest of non-local sockeye salmon in each of the eleven years investigated (Table 4, Figures 2-7).

Beyond these basic conclusions, there is little concrete information we could gain from this methodology. The high level of unassessed harvest in several years and the relatively large ranges in other years, indicate that the model was highly sensitive to departures from assumptions. Any conclusions drawn from this method should be looked at as trend and with caution.

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Table 1. Estimated stock composition number and proportion, in percent, for the KMA (excluding Cape Igvak), July 6-25 sockeye salmon harvest for 1983-1994, except 1989. Stock composition estimates are categorized as: non-local, local, and unassessed.

Year	Estimated Stock Composition (Number of Fish)			Estimated Stock Composition (Percent of Total Harvest)			Total Catch
	Non-local	Local	Unassessed	Non-local	Local	Unassessed	
1983	82,740	191,711	0	30.1%	69.9%	0.0%	274,451
1984	75,054	136,396	264,106	15.8%	28.7%	55.5%	475,556
1985	51,634	120,091	61,967	22.1%	51.4%	26.5%	233,692
1986	76,401	31,831	612,480	10.6%	4.4%	85.0%	720,712
1987	267,806	97,809	61,693	62.7%	22.9%	14.4%	427,308
1988	927,002	317,489	12,147	73.8%	25.3%	1.0%	1,256,638
1990	303,322	819,024	0	27.0%	73.0%	0.0%	1,122,346
1991	252,177	869,423	519,811	15.4%	53.0%	31.7%	1,641,411
1992	1,448,165	452,109	0	76.2%	23.8%	0.0%	1,900,274
1993	625,624	524,459	25,525	53.2%	44.6%	2.2%	1,175,608
1994	130,225	537,885	4,256	19.4%	80.0%	0.6%	672,366

Table 2. Estimated sockeye salmon composition, in number of fish, and the associated relative minimum and maximum for July 6-25 KMA harvest (excluding Cape Igvak), 1983-1994 (except for 1989). Stock composition categories are: non-local, local and unassessed.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	82,740	68,063	127,423	191,711	147,028	206,388	0	274,451
1984	75,054	1,600	84,214	136,396	127,236	209,850	264,106	475,556
1985	51,634	31,055	61,444	120,091	110,281	140,670	61,967	233,692
1986	76,401	19,145	79,114	31,831	29,118	89,087	612,480	720,712
1987	267,806	246,798	289,520	97,809	76,095	118,817	61,693	427,308
1988	927,002	866,614	966,186	317,489	278,305	377,877	12,147	1,256,638
1990	303,322	119,976	394,088	819,024	728,258	1,002,370	0	1,122,346
1991	252,177	74,989	347,406	869,423	774,194	1,046,611	519,811	1,641,411
1992	1,448,165	1,389,119	1,497,744	452,109	402,530	511,155	0	1,900,274
1993	625,624	423,320	671,875	524,459	478,208	726,763	25,525	1,175,608
1994	130,225	66,993	196,692	537,885	471,418	601,117	4,256	672,366

Table 3. Estimated stock composition and the associated relative minimum and maximum, in percent, for July 6-25 KMA harvest (excluding Cape Igvak) for 1983-1994 (except 1989). Stock composition categories are : non-local, local and unassessed.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	30.1%	24.8%	46.4%	69.9%	53.6%	75.2%	0.0%	274,451
1984	15.8%	0.3%	17.7%	28.7%	26.8%	44.1%	55.5%	475,556
1985	22.1%	13.3%	26.3%	51.4%	47.2%	60.2%	26.5%	233,692
1986	10.6%	2.7%	11.0%	4.4%	4.0%	12.4%	85.0%	720,712
1987	62.7%	57.8%	67.8%	22.9%	17.8%	27.8%	14.4%	427,308
1988	73.8%	69.0%	76.9%	25.3%	22.1%	30.1%	1.0%	1,256,638
1990	27.0%	10.7%	35.1%	73.0%	64.9%	89.3%	0.0%	1,122,346
1991	15.4%	4.6%	21.2%	53.0%	47.2%	63.8%	31.7%	1,641,411
1992	76.2%	73.1%	78.8%	23.8%	21.2%	26.9%	0.0%	1,900,274
1993	53.2%	36.0%	57.2%	44.6%	40.7%	61.8%	2.2%	1,175,608
1994	19.4%	10.0%	29.3%	80.0%	70.1%	89.4%	0.6%	672,366

Table 4. UCI sockeye salmon run number, the estimated number of UCI sockeye salmon harvested within the KMA (excluding Cape Igvak) July 6-25 fisheries, and estimates of the percent of the UCI run harvested within the KMA during July 6-25 period, for 1983-1994 (except 1989).

Year	Terminal Run	UCI					
		Estimated Kodiak July 6-25 (Number of Fish)			Estimated Kodiak July 6-25 (Percent of UCI Run)		
		Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum
1983	6,490,514	82,740	68,063	132,381	1.3%	1.0%	2.0%
1984	3,445,940	75,054 ^a	1,600 ^a	84,623 ^a	2.1% ^a	0.0% ^a	2.4% ^a
1985	5,612,154	51,634 ^a	31,055 ^a	61,444 ^a	0.9% ^a	0.6% ^a	1.1% ^a
1986	5,967,514	76,401 ^a	19,145 ^a	91,006 ^a	1.3% ^a	0.3% ^a	1.5% ^a
1987	11,890,444	267,806	246,798	295,144	2.2%	2.0%	2.4%
1988	8,428,431	927,002	866,614	966,445	9.9%	9.3%	10.3%
1990	4,888,057	303,322	119,976	403,826	5.8%	2.4%	7.6%
1991	3,526,609	252,177 ^a	74,989 ^a	352,921 ^a	6.7% ^a	2.1% ^a	9.1% ^a
1992	10,472,085	1,448,165	1,389,119	1,497,744	12.1%	11.7%	12.5%
1993	6,193,275	625,624	423,320	692,937	9.2%	6.7%	10.1%
1994	5,136,077	130,225	66,993	219,276	2.5%	1.3%	4.1%

^a These years have a large (> 25%) unassessed proportion, and should be viewed in that context.

Table 5. Comparison of average weight stock contribution estimates for July 6-25, and previous estimates of stock contribution using other methodology (Barrett 1989, Barrett and Swanton 1991, and Barrett and Swanton 1992) for previously studied areas within the KMA.

Year	Area	Previous Estimates		Average weight estimates					
		Non-local	Local	Non-local	Relative Minimum	Relative Maximum	Local	Relative Minimum	Relative Maximum
1988	North Shelikof Strait Area	96% ^a	4% ^a	136%	121%	163%	0%	0%	0%
1990	South West Afognak Section Mainland District	68% ^b	32% ^b	10%	3%	57%	90%	43%	97%
		92% ^b	8% ^b	90%	78%	93%	10%	7%	22%
1991	North Shelikof Strait Area	>50% ^{c, d}	<50% ^{c, d}	88%	63%	93%	12%	7%	37%
1992	North Shelikof Strait Area	>50% ^{c, d}	<50% ^{c, d}	92%	89%	94%	8%	6%	11%

^a Age composition was the principle method employed; though previous tagging studies, run timing and length at age information were also considered (Barrett 1989).

^b Scale pattern analysis was the principle method employed; though run timing, average fish weight, age at length and age composition were also considered (Barrett and Swanton 1991).

^c Age markers, run timing and average fish weight were all considered, with no single best method discussed (Barrett and Swanton 1992).

^d The report (Barrett and Swanton 1992) did not specify a specific percentage, only a reference to "dominate" or "majority" was made.

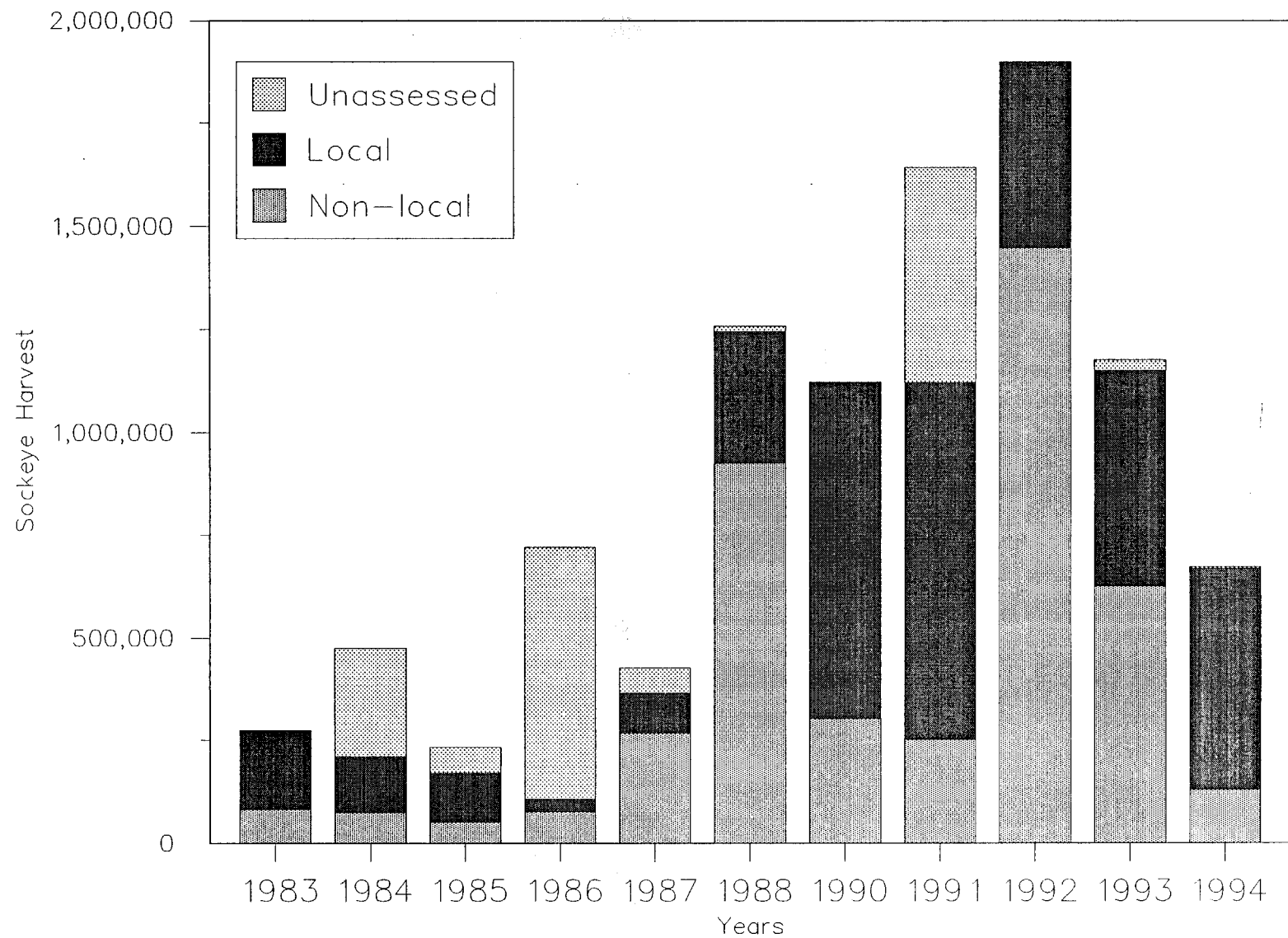


Figure 2. Non-local, local, and unassessed point estimates for the KMA (excluding Cape Igvak), July 6–25, 1983–1994 (except 1989).



Figure 3. Non-local sockeye harvest point, relative maximum and relative minimum estimates for the KMA (excluding Cape Igyok), July 6–25, 1983–1994 (except 1989). The years 1984, 1985, 1986 and 1991 are not presented here due to a large (>25%) unassessed proportion.

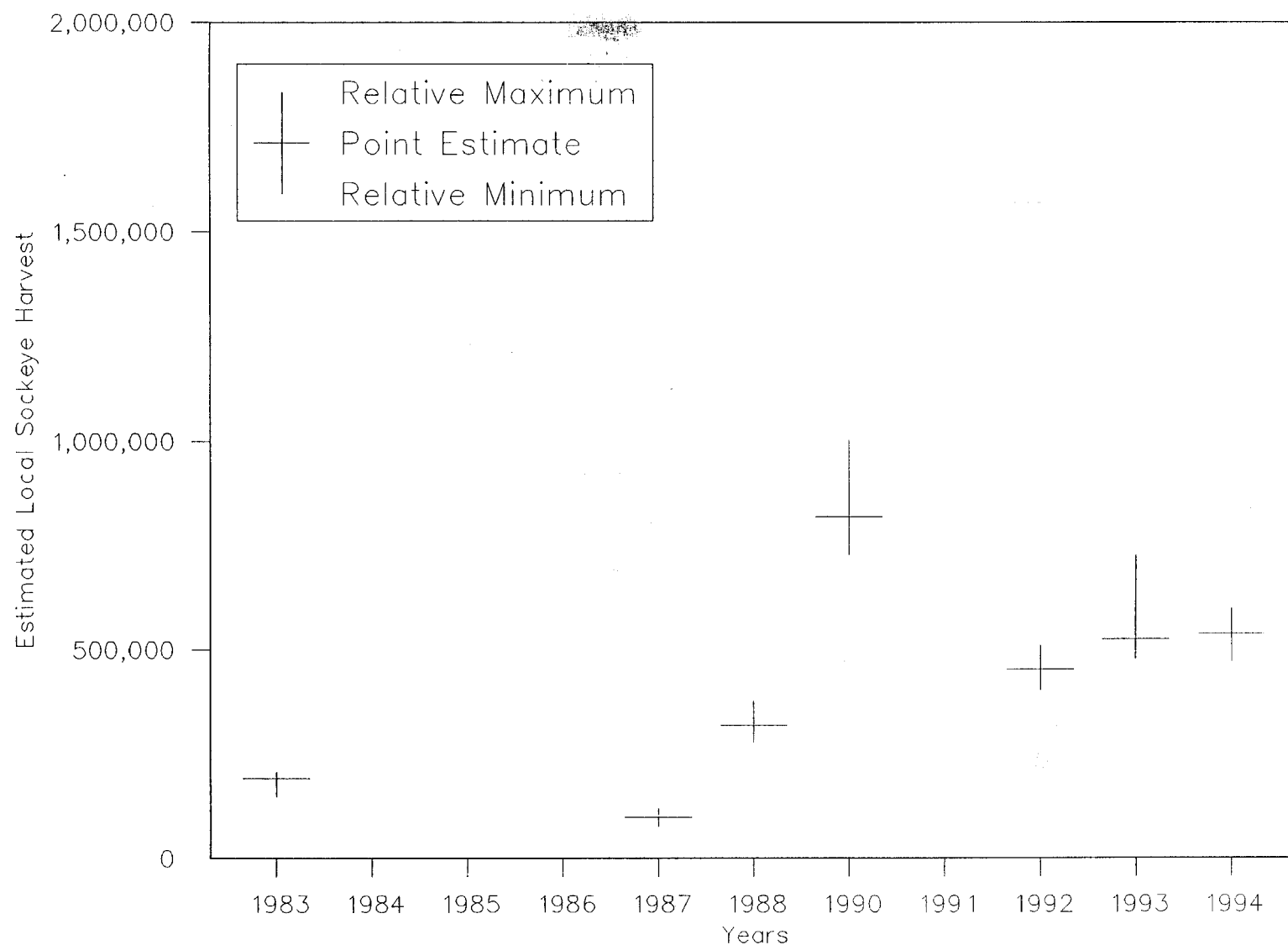


Figure 4. Local sockeye harvest point, relative maximum and relative minimum estimates for the KMA (excluding Cape Igvak), July 6–25, 1983–1994 (except 1989). The years 1984, 1985, 1986 and 1991 are not presented here due to the large (>25%) proportion of unassessed.

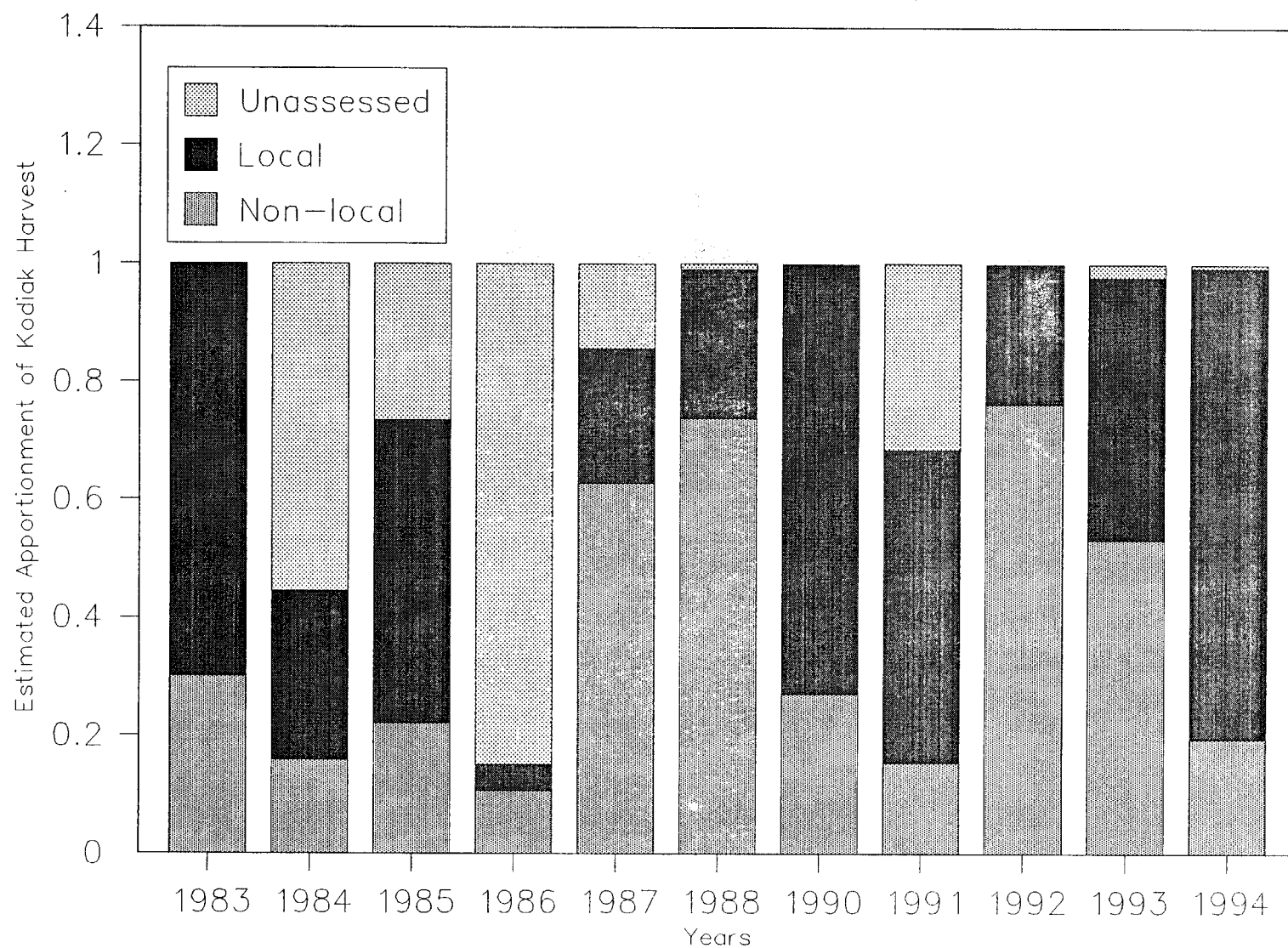


Figure 5. Estimated apportionment of the KMA (excluding Cape Igvak), for July 6–25, 1983–1994 (except 1989). The categories are: non-local, local and unassessed.

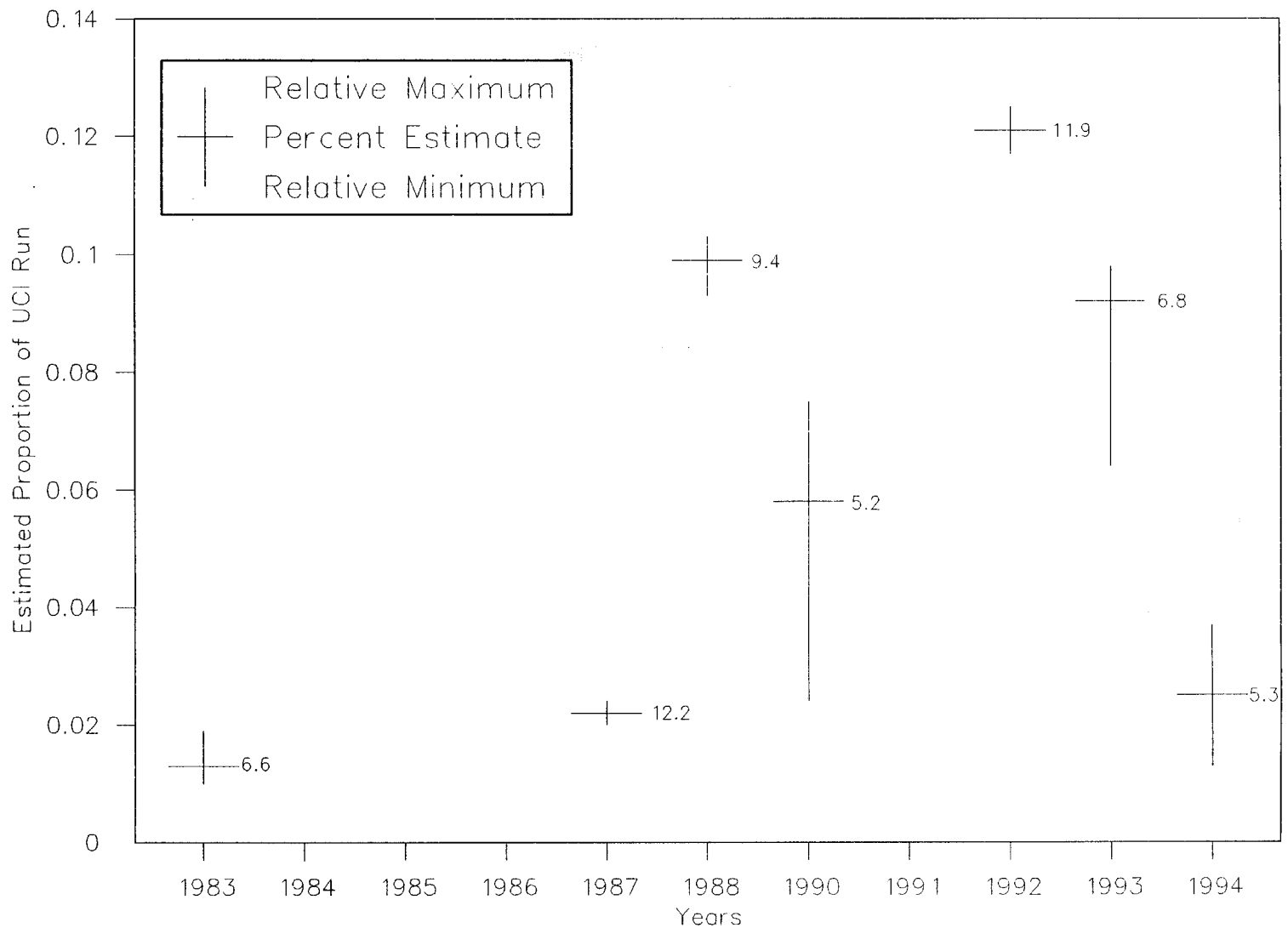


Figure 6. Point estimate of the proportion, relative minimum and relative maximum of the UCI run harvested in the KMA (excluding Cape Igvak), during July 6–25, 1983–1994 (except 1989). At each point estimate is the estimated UCI run, in millions of sockeye salmon. The years 1984, 1985, 1986 and 1991 are not presented due to their large ($> 25\%$) unassessed proportion.

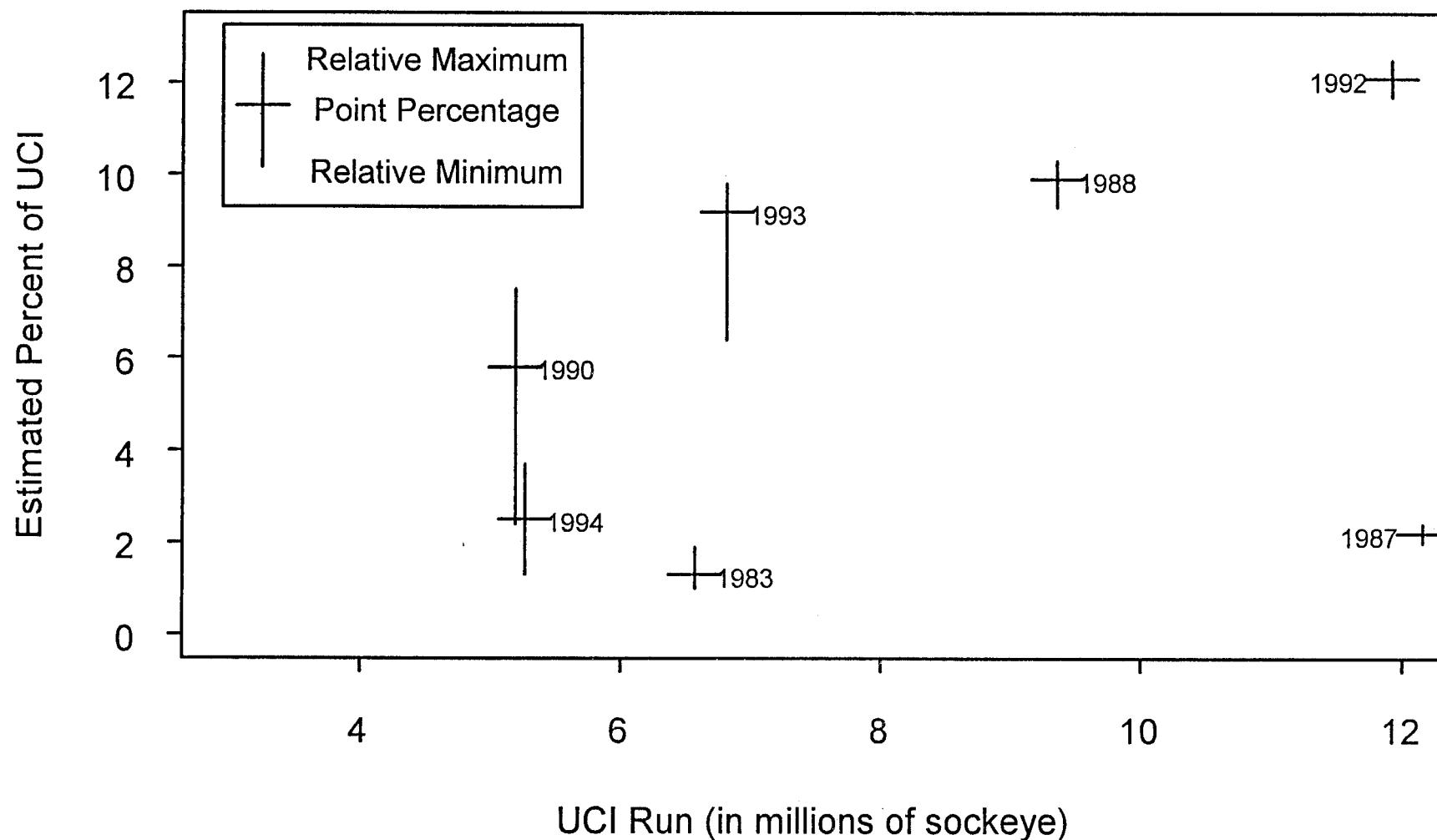


Figure 7. Point estimate of the percent, relative minimum and relative maximum of the UCI run harvested in the KMA (excluding Cape Igvak), during July 6-25, 1983-1994 (except 1989) by UCI run strength. The years 1984, 1985, 1986 and 1991 were not presented here due to the large (>25%) unassessed proportion estimates for these years.

APPENDIX

As was described in the Methods Section of this report, to estimate the proportion of non-local sockeye salmon harvested in a specific area and year (\hat{p}_{NL}) we used the following equation:

$$\hat{p}_{NL} = \frac{\mu_{IP} - \hat{\mu}_{LOC}}{\hat{\mu}_{NL} - \hat{\mu}_{LOC}}, \quad (1)$$

where:

\hat{p}_{NL} = the estimated proportion of non-local sockeye salmon in the sockeye catch,

μ_{IP} = the average weight of sockeye salmon during the intercept period (July 6-25),

$\hat{\mu}_{NL}$ = the estimated average weight of non-local sockeye salmon during the intercept period (July 6-25),

$\hat{\mu}_{LOC}$ = the estimated average weight of local (Kodiak) sockeye salmon during the intercept period (July 6-25).

As discussed in the text, μ_{IP} was known (though mis-reporting on fish tickets may have caused error in this term), thus bias in \hat{p}_{NL} was considered the result of possible bias in $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$. To assist in quantifying this bias, we considered possible variations in $\hat{\mu}_{NL}$ and $\hat{\mu}_{LOC}$, though not leading to the mean-squared-error of these terms, these variations lead to a range of values for $\hat{\mu}_{NL}$, $\hat{\mu}_{LOC}$ and \hat{p}_{NL} .

In this report the $\hat{\mu}_{LOC}$ term was estimated using the weighted average weight of the June and August average commercial catch weights, by area, gear and year. To estimate the variation of $\hat{\mu}_{LOC}$, the June and August average weights from the commercial catch were each used separately to estimate $\hat{\mu}_{LOC}$. Therefore for each specific area and year, a total of three estimates were calculated for $\hat{\mu}_{LOC}$:

$$\hat{\mu}_{LOC} = \frac{WT_{Jun} + WT_{Aug}}{n_{Jun} + n_{Aug}} \quad (2)$$

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$$\hat{\mu}_{LOC} = \frac{WT_{Jun}}{n_{Jun}} \quad (3)$$

$$\hat{\mu}_{LOC} = \frac{WT_{Aug}}{n_{Aug}} \quad (4)$$

where:

WT_{Jun} = Total weight of sockeye salmon harvested in June for a specific area and year;

WT_{Aug} = Total weight of sockeye salmon harvested in August, for a specific area and year;

n_{Jun} = Total number of sockeye salmon harvested in June, for a specific area and year;

n_{Aug} = Total number of sockeye salmon harvested in August, for a specific area and year.

From these equations, the point estimate of $\hat{\mu}_{LOC}$ was obtained from equation (2) and bounds from equations (3) and (4).

For example, if $WT_{Jun} = 346,087$ lbs, $n_{Jun} = 71,407$ fish, $WT_{Aug} = 535,043$ lbs and $n_{Aug} = 108,544$ fish, then $\hat{\mu}_{LOC} = 4.90$ lbs (equation (2)), 4.85 lbs (equation (3)) or 4.93 lbs (equation (4)). From this example we would say, the average local weight during July 6-25, $\hat{\mu}_{LOC}$, was approximately 4.90 lbs, with a range from approximately 4.85 lbs to 4.93 lbs.

The variation in the estimate of $\hat{\mu}_{NL}$ was more difficult to approach, since we have little information about relative contribution of various stocks to the estimate of $\hat{\mu}_{NL}$. It was believed, as was stated in our assumptions, the majority of non-local sockeye salmon for a given year are likely sockeye salmon in-route to UCI. Therefore, $\hat{\mu}_{NL}$ was calculated from the average weight of sockeye salmon harvested within UCI from July 5-August 8. Other stocks, however, are known to occur in the KMA as well, such as sockeye salmon bound for the Chignik and Bristol Bay Management Areas (Nicholson 1978). Of these other stocks, only Chignik was thought to contribute a significant number of sockeye salmon to the Kodiak catch (Barrett and Swanton 1990).

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To consider the variation of $\hat{\mu}_{NL}$, we decided to use a two stock approach (Chignik and UCI), rather than a single stock approach (UCI only). Again, we depended on the fish ticket database for information, and we used the same time period as when calculating just the UCI average weight (July 5- August 8), since the distance from Kodiak to Chignik is approximately the same as the distance from Kodiak to UCI.

The procedure was to estimate the average weight of sockeye salmon harvested in UCI, then estimate the average weight of sockeye salmon harvested in the Chignik Area. We then calculated the weighted average, by harvest size, of these two average weights.

In equation form:

$$\hat{\mu}_{NL} = \mu_{UCI} \frac{n_{UCI}}{n_{UCI} + n_{Chig}} + \mu_{Chig} \frac{n_{Chig}}{n_{UCI} + n_{Chig}} .$$

where

$\hat{\mu}_{NL}$ = the estimated average weight of non-local sockeye salmon during the intercept period (July 6-25);

μ_{UCI} = the average weight of sockeye salmon harvested in UCI between July 5 and August 8;

μ_{Chig} = the average weight of sockeye salmon harvested in the Chignik area between July 5 and August 8;

n_{UCI} = the number of sockeye salmon harvested in UCI between July 5 and August 8;

n_{Chig} = the number of sockeye salmon harvested in the Chignik area between July 5 and August 8.

For example, if $\mu_{UCI} = 6.64$ lbs, $n_{UCI} = 6,615,205$ fish, $\mu_{Chig} = 7.55$ lbs, and $n_{Chig} = 569,776$ fish, then $\hat{\mu}_{NL} = 6.71$ lbs, from equation (5).

In conclusion, our best point estimate for the proportion, and subsequent number, of non-local sockeye salmon harvested between July 6-25, within an area and year for the KMA would

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employ the UCI average weight of sockeye salmon harvested between July 5 - August 8, of that year, as the best estimate of non-local average weight, the weighted average weight of sockeye salmon harvested in June and August, for that area, gear and year, as the best estimate of local average weight of sockeye salmon. The relative minimum and maximum non-local harvest levels would be taken from the minimum and maximum values generated from the 5 other estimation techniques, as described above. Specifically:

- 1) $\hat{\mu}_{NL}$ = average weight of sockeye salmon harvested in UCI between July 5 and August 8 and;
 $\hat{\mu}_{LOC}$ = average weight of sockeye salmon harvested within that area in June;
- 2) $\hat{\mu}_{NL}$ = average weight of sockeye salmon harvested in UCI between July 5 and August 8 and;
 $\hat{\mu}_{LOC}$ = average weight of sockeye salmon harvested within that area in August;
- 3) $\hat{\mu}_{NL}$ = weighted average weight of sockeye salmon harvested in UCI and the Chignik area between July 5 and August 8 and;
 $\hat{\mu}_{LOC}$ = weighted average weight of sockeye salmon harvested within that area in June and August;
- 4) $\hat{\mu}_{NL}$ = weighted average weight of sockeye salmon harvested in UCI and the Chignik area between July 5 and August 8 and;
 $\hat{\mu}_{LOC}$ = average weight of sockeye salmon harvested within that area in June;
- 5) $\hat{\mu}_{NL}$ = weighted average weight of sockeye salmon harvested in UCI and the Chignik area between July 5 and August 8 and;
 $\hat{\mu}_{LOC}$ = average weight of sockeye salmon harvested within that area in August.

We used the term relative minimum and maximum since there are still area, gear and year estimations which were labelled "unassessed", due to minor differences (< 0.5 lbs; Appendix B) between the estimated non-local and local average weights. Furthermore, the minimum and maximum estimates are susceptible to departures from the assumptions, just as the point estimate, thus they do not represent the absolute minimum and maximum estimates. The relative minimum and maximum estimates should (overall), however, gave a better prediction of the methodology than the estimated variance.

Appendix B. Criteria estimation and justifications, for the difference between the estimated non-local and local average weights.

There was much discussion on the criteria used in the Vining and Barrett (1994) report which dictated whether an areas harvest would be assessed as to stocks of origin (non-local versus local). The two criteria were based on a "best guess" by the authors and these criteria were not tested within the report for the sensitivity of the model to the criteria. It was desired for this report to have a single criteria with some specific, defensible justification.

It was decided the criterion should be based on the difference between the estimated non-local average weight (average weight of sockeye caught in UCI) and the estimated local average weight (average weight for a specific area within the KMA). To consider this criteria we divided our discussion into two parts: a statistical discussion and a mathematical discussion. However, both discussions are quite interrelated.

For the statistical aspect we wanted the criteria to be at least larger than the expected natural fluctuation, i.e. the error between the estimated local average weight and the true local average weight. To address this, we considered the variation from observed and estimated average weights found in a Kodiak "terminal sockeye fishery", the Olga Bay area (statistical areas 25730-25740, Appendix B.1), within the Alitak Bay District.

From 1978 through 1994, Olga Bay has had a fishery in June, July and August (prior to 1978 only a July and August fishery was conducted). Thus, we subtracted the observed average weight in July from the estimated average weight (total weight of sockeye caught in June and August divided by the total number of sockeye caught in June and August). The histogram (Appendix B.2) showed a basic normal distribution and upon performing a Lilliefors test (Conover 1980) it was found that the distribution was not statistically different (though marginal $p=.177$) from a normal distribution.

The mean of the data was 0.00675 lbs and the variance was 0.06010 lbs², which led to a standard deviation of 0.24698. Under the assumption of an approximate normal distribution in the differences, to capture 60%, 70%, 80%, or 90% of the natural fluctuation (using a t-distribution with 16 degrees-of-freedom) the criteria would need to be greater than 0.21, 0.26, 0.33 or 0.43 lbs, respectively.

Three problems occur in proceeding beyond this: first this fluctuation is strictly estimated using set gillnet gear, second this represents only one area with limited sockeye streams and finally, from this, how do we get a single criteria between non-local and local average weight estimates. This did not present an actual criteria but it did provide some minimum value to consider.

The next part was what we referred to as the mathematical discussion. To simplify the discussion, we let the average weight during the intercept period be denoted by C , we let the average weight of non-local sockeye be denoted by x , we let the average weight of local sockeye

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be denoted by y and we let the proportion of non-local sockeye be denoted by z . From these substitutions, we got the following equation:

$$z = \frac{(C-y)}{(x-y)} \quad (1)$$

A three dimensional representation of this equation, assuming $x > C > y$ (which is true in most areas and years), and letting $C = 5.5$ lbs, is represented in Appendices B.3 and B.4, with a cut plane look in Appendices B.5 and B.6. It is obvious that as x approaches C (5.5 lbs in this example) and y approaches C (5.5 lbs in this example), small changes in x and y will cause large changes in z . This is further illustrated when looking at the partial derivatives:

$$\frac{\partial z}{\partial x} = -\frac{(C-y)}{(x-y)^2} \quad (2)$$

$$\frac{\partial z}{\partial y} = -\frac{(x-C)}{(x-y)^2} \quad (3)$$

It is obvious from the graphs and the two partial derivatives, as y approaches C and x approaches C , which equates to y approaching x , the slope approaches negative infinity. When both x and y values were causing an increase in z at a rate greater than the rate x and y were increasing, then this would be an area of concern. This would happen when the two partial derivatives are equal to -1 (i.e. the two slopes are -1). Setting the two partial derivatives equal to -1 we get:

$$x = y + \sqrt{C-y} \dots \text{for } \frac{\partial z}{\partial x} = -1 \quad (4)$$

$$y = x - \sqrt{x-C} \dots \text{for } \frac{\partial z}{\partial y} = -1 \quad (5)$$

-Continued-

Taking the derivative of both partials with respect to the other variable and setting those partials equal to zero, we got that $C-y = x-C = 0.25$ or $y = C - 0.25$ and $x = C + 0.25$.

To look at this graphically we solved Equation (5) for x :

$$x = y + \frac{1}{2} \pm \sqrt{y - C + \frac{1}{4}} \quad (6)$$

The two partials equal to -1 are graphed in Appendix B.7. This shows that when $C - y > 0.25$ and $x - C > 0.25$ then there is no slope less than -1. However, we felt the area of greater concern is when both slopes are less than -1, not just one. The single criteria which will guarantee that at least one slope is greater than -1, is the criteria to only consider estimations when $x - y > 0.5$ lbs. By placing this as the restriction, it would also provide for the sum of the two slopes to always be greater than -2. This is shown irrespective of C by looking at the general solution for the sum of the two partials: Let $d_1 = C - y$ and let $d_2 = x - C$, then

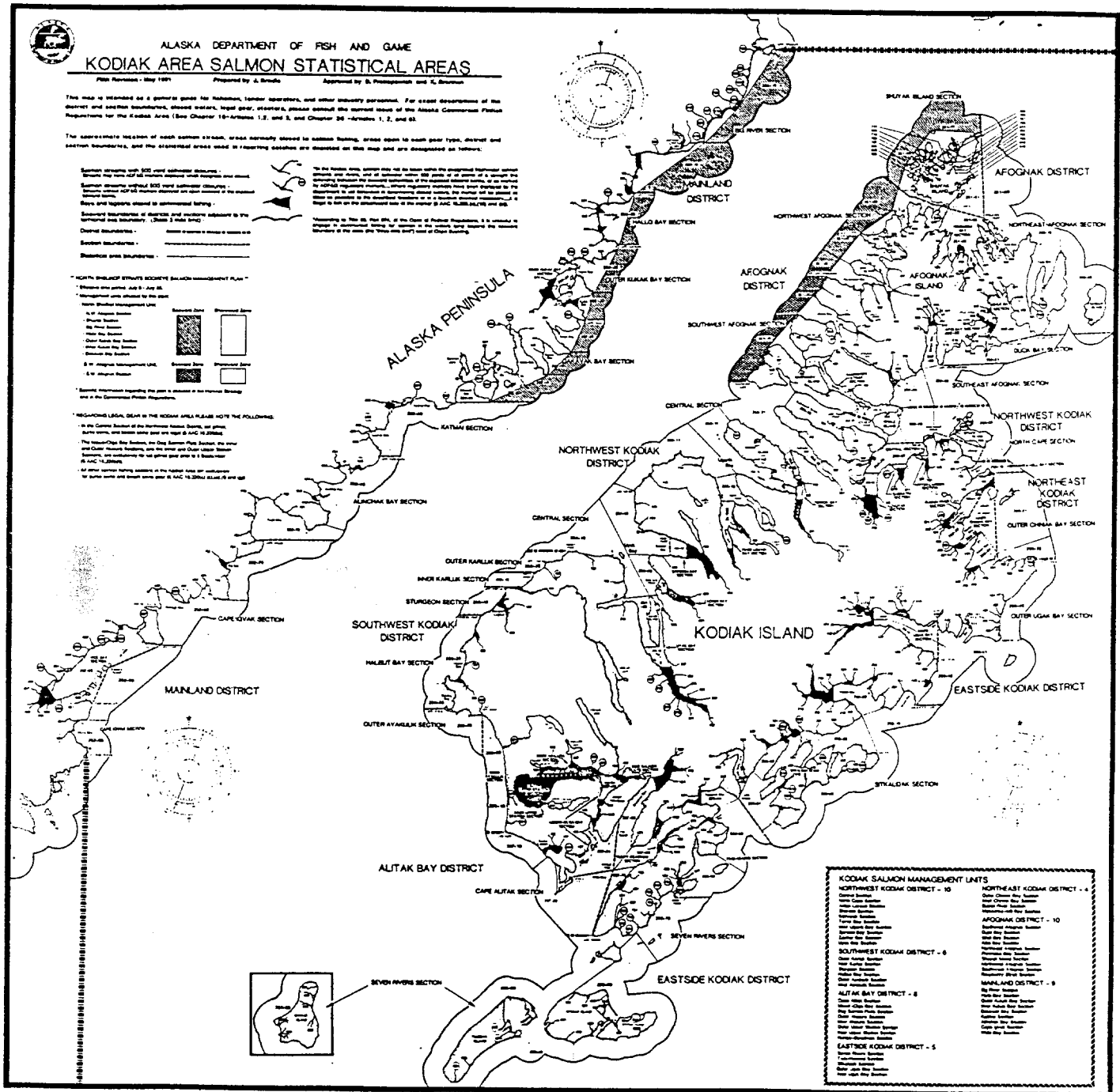
$$\frac{\partial z}{\partial y} + \frac{\partial z}{\partial x} = -\frac{d_2}{(d_2 + d_1)^2} - \frac{d_1}{(d_2 + d_1)^2}, \quad (7)$$

$$\frac{\partial z}{\partial y} + \frac{\partial z}{\partial x} = -\frac{1}{(d_2 + d_1)}, \quad (8)$$

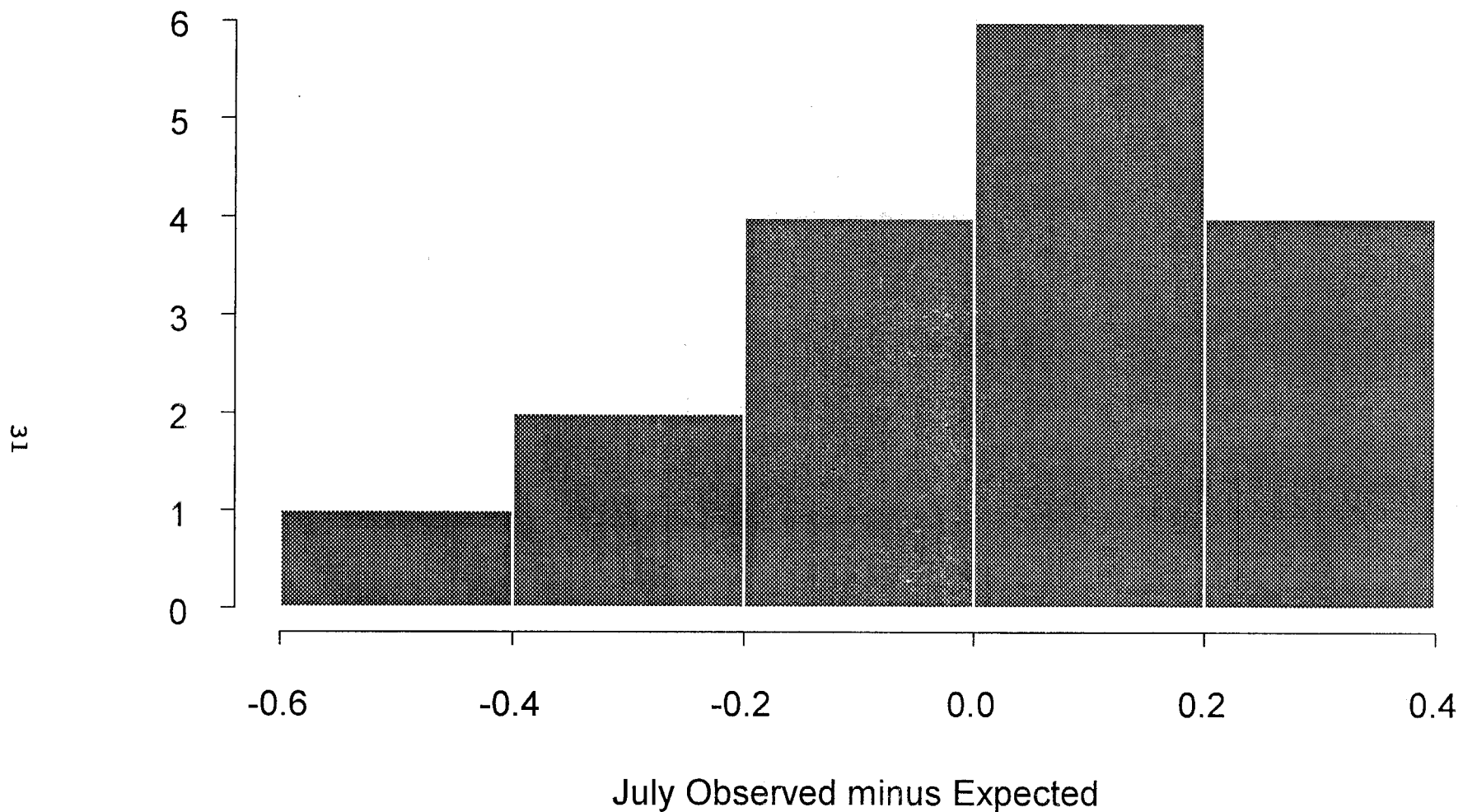
If $d_2 + d_1 < 0.5$ then:

$$\frac{\partial z}{\partial y} + \frac{\partial z}{\partial x} < -\frac{1}{0.5} = -2 \quad (9)$$

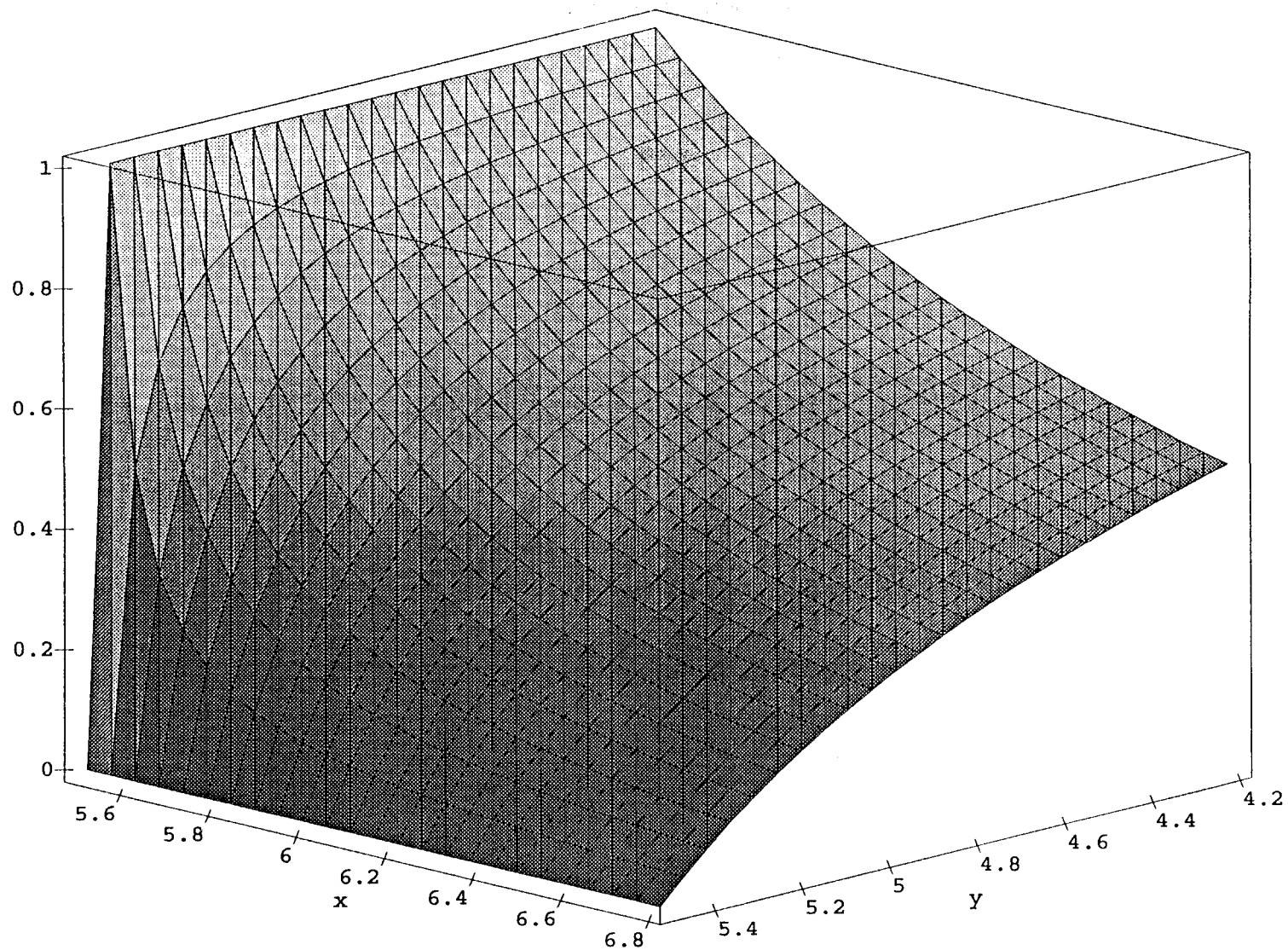
Thus we felt a difference of 0.5 lbs between the estimated non-local and local average weights would be an acceptable criteria. The value of 0.5 lbs is mathematically derived to minimize large fluctuations in the estimated proportion of non-local sockeye salmon and was further supported by the estimated natural fluctuation found in the Olga Bay Area.



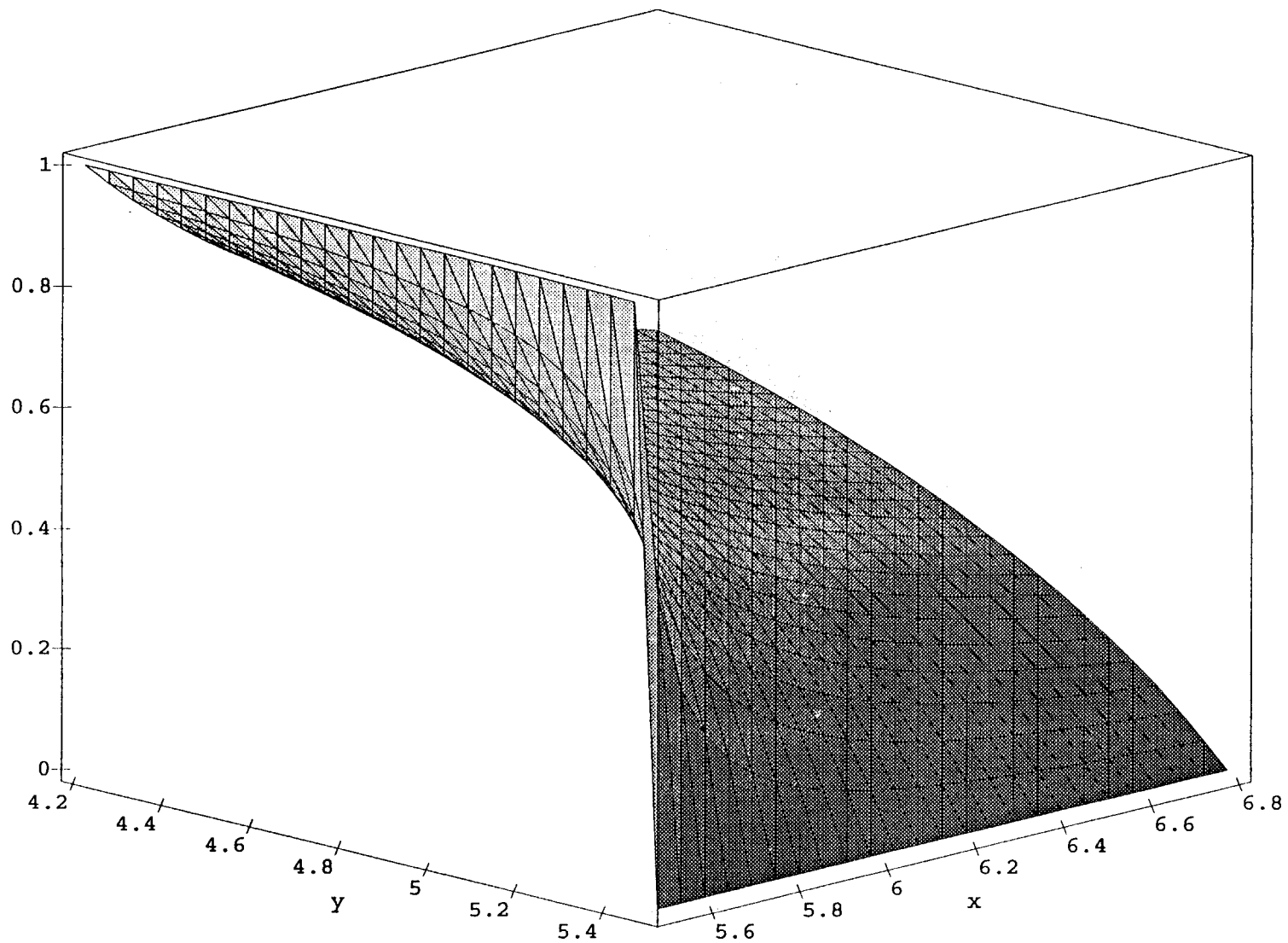
Appendix B.1. Map of the Kodiak Management Area with salmon statistical areas shown. Olga Bay is found in the southwest region of Kodiak Island.



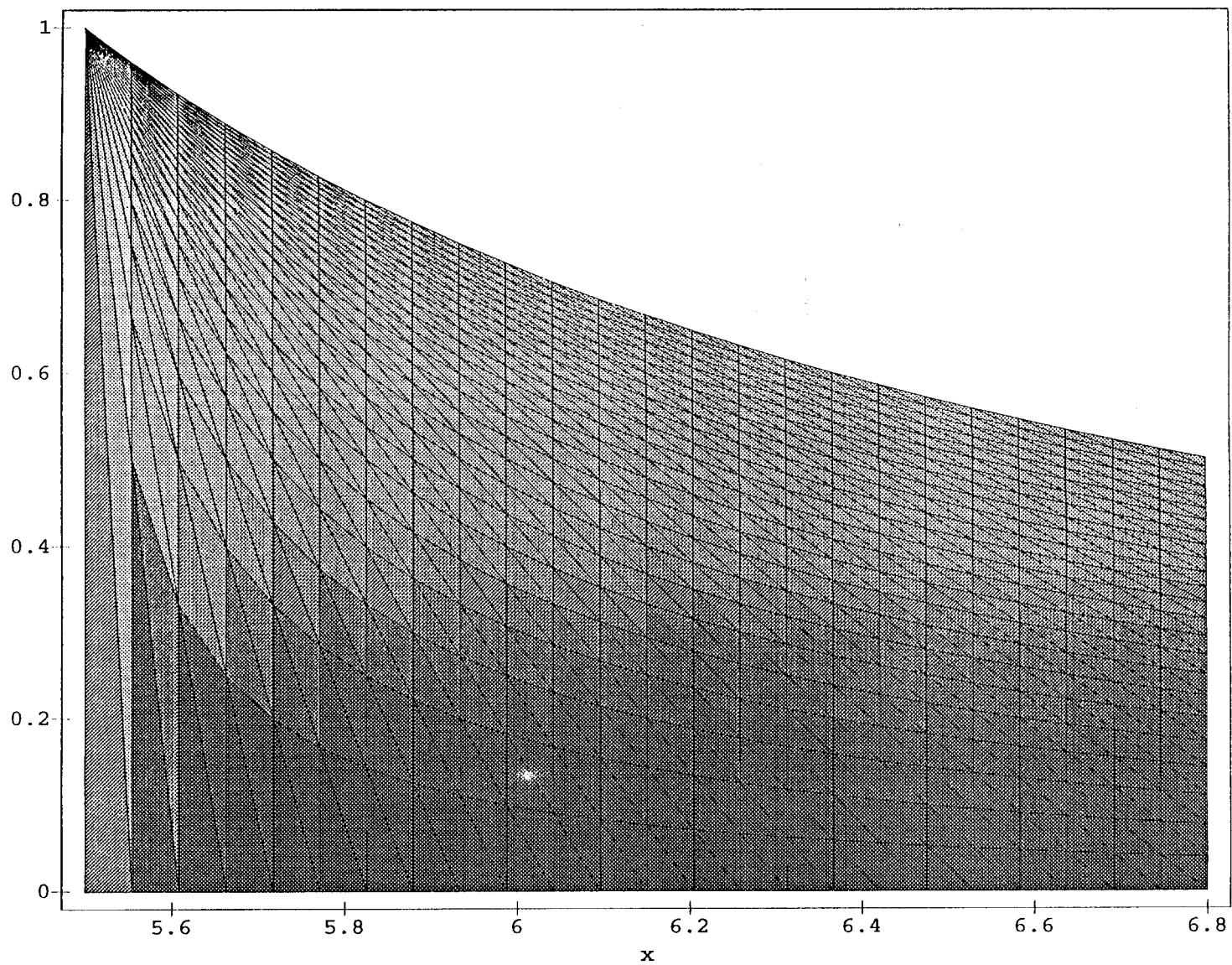
Appendix B.2. Histogram of the Olga Bay (statistical areas 25730-25740) observed July average weight in the sockeye harvest minus the expected (estimated) July average weight of sockeye harvest.



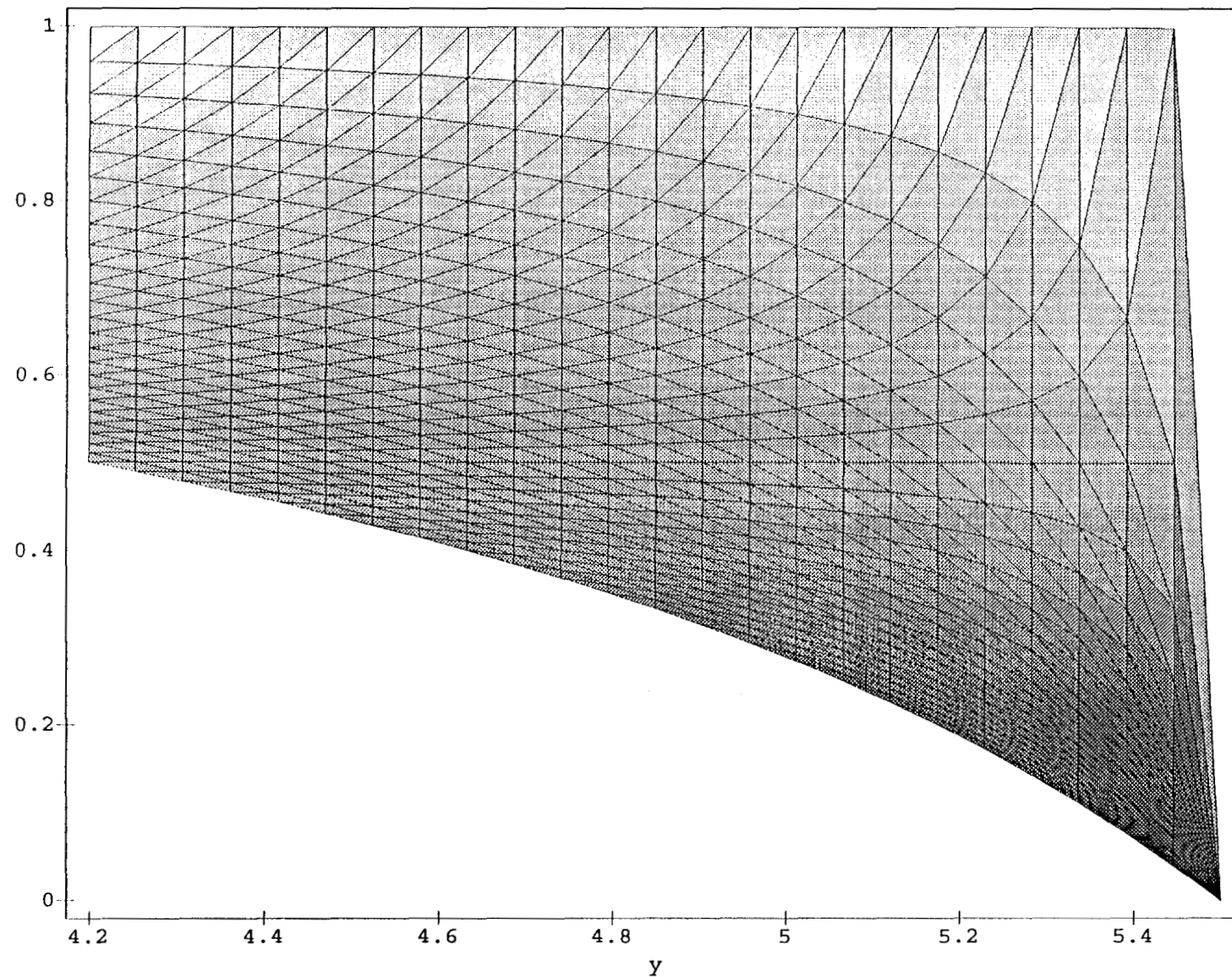
Appendix B.3. Three-dimensional plot of the equation $z = (C - y) / (x - y)$, where $C = 5.5$.



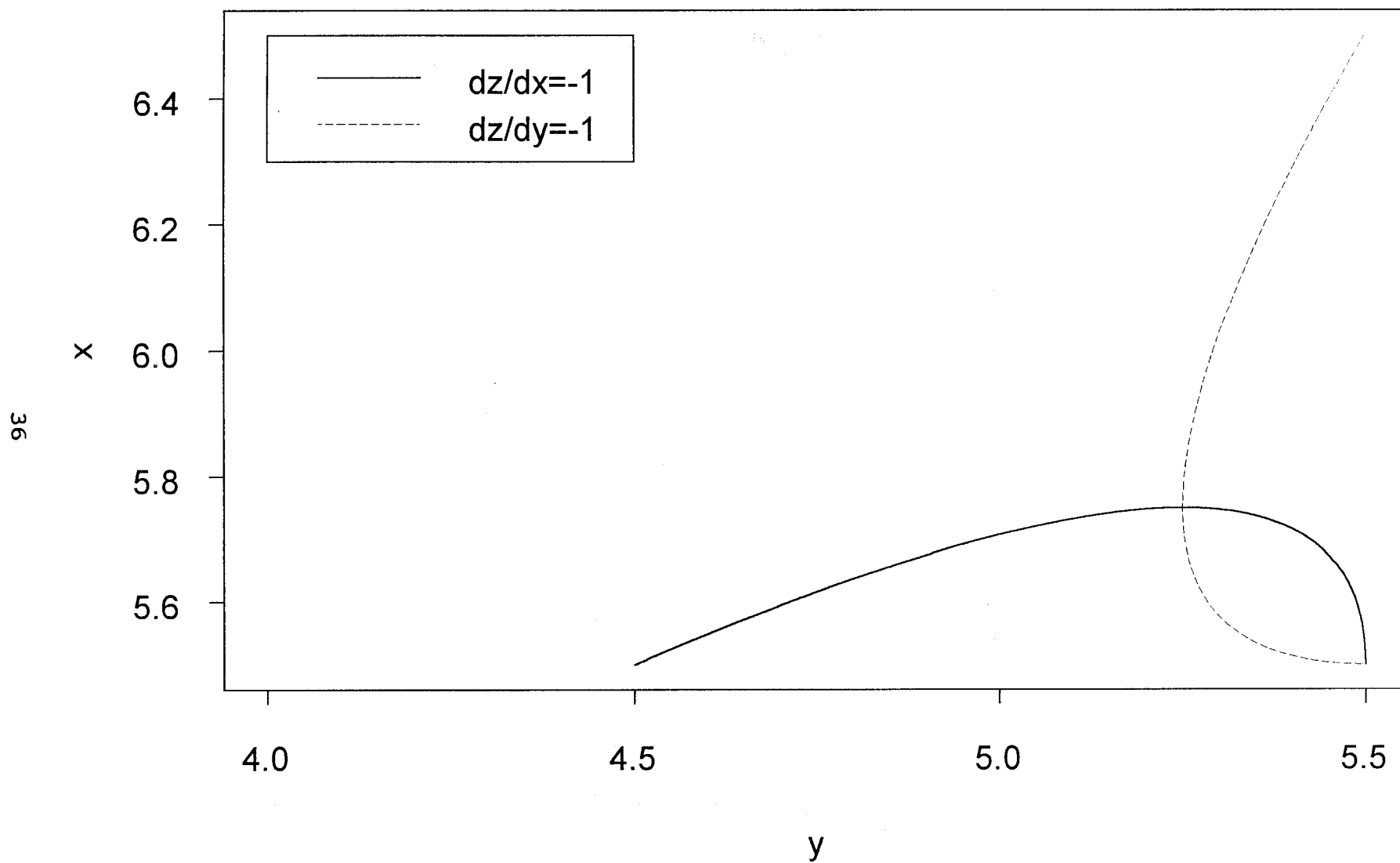
Appendix B.4. Three-dimensional plot of the equation $z = (C - y) / (x - y)$, where $C = 5.5$ (same plot as Appendix B.3, except at different view point).



Appendix B.5. A cut-plane (y-plane) plot of the equation $z=(C-y)/(x-y)$, where $C=5.5$.



Appendix B.6. A cut-plane (x -plane) plot of the equation $z=(C-y)/(x-y)$, where $C=5.5$.



Appendix B.7. Plots of the two partial derivatives (dz/dx and dz/dy) set equal to -1 .

APPENDIX C. SOCKEYE CATCH INFORMATION; NUMBER, WEIGHT AND AVERAGE WEIGHT, FOR JUNE, JULY 6-25 AND AUGUST BY AREA AND YEAR

Appendix C.1. Sockeye salmon seine catch information; number, weight and average weight, for the Shuyak Island and Northwest Afognak Sections (statistical areas 25130-25170), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	4,748	21,762	4.58
1983	July 6-25	10,719	63,770	5.95
1983	August	143	621	4.34
1984	June	6,568	28,776	4.38
1984	July 6-25	2,204	11,362	5.16
1984	August	11	36	3.27
1985	June	2,415	10,421	4.32
1985	July 6-25	1,116	4,451	3.99
1985	August	1	4	4.00
1986	June	4,469	20,696	4.63
1986	July 6-25	113	706	6.25
1986	August	34	183	5.38
1987	June	786	3,971	5.05
1987	July 6-25	5,344	35,189	6.58
1987	August	1,765	9,682	5.49
1988	June	1,992	8,680	4.36
1988	July 6-25	183,994	1,348,795	7.33
1988	August	1,291	8,225	6.37
1990	June	5,151	20,574	3.99
1990	July 6-25	5,157	23,387	4.54
1990	August	13,761	76,951	5.59
1991	June	5,858	28,100	4.80
1991	July 6-25	7,203	38,608	5.36
1991	August	95	364	3.83
1992	June	6,959	28,219	4.06
1992	July 6-25	10,193	60,459	5.93
1992	August	3,597	18,304	5.09
1993	June	12,619	57,465	4.55
1993	July 6-25	17,874	95,431	5.34
1993	August	1,739	9,945	5.72
1994	June	4,512	19,534	4.33
1994	July 6-25	4,315	18,778	4.35
1994	August	1,909	9,429	4.94

Appendix C.2. Sockeye salmon seine catch information; number, weight and average weight, for the Southwest Afognak Section (statistical areas 25110-25120), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	18,918	115,460	6.10
1983	August	533	3,162	5.93
1984	June	150	1,161	7.74
1984	July 6-25	14,047	77,269	5.50
1984	August	505	2,542	5.03
1985	June	0	0	0.00
1985	July 6-25	1,740	9,956	5.72
1985	August	633	3,288	5.19
1986	June	2,953	14,177	4.80
1986	July 6-25	20,680	113,662	5.50
1986	August	8,757	51,093	5.83
1987	June	105	573	5.46
1987	July 6-25	45,869	339,762	7.41
1987	August	3,253	21,490	6.61
1988	June	286	1,352	4.73
1988	July 6-25	86,649	624,042	7.20
1988	August	6,442	38,115	5.92
1990	June	5,533	23,668	4.28
1990	July 6-25	22,691	124,989	5.51
1990	August	103,868	568,143	5.47
1991	June	8,411	38,917	4.63
1991	July 6-25	34,183	191,492	5.60
1991	August	26,510	139,548	5.26
1992	June	13,009	56,584	4.35
1992	July 6-25	49,739	307,947	6.19
1992	August	18,688	94,810	5.07
1993	June	124,755	570,199	4.57
1993	July 6-25	73,967	414,775	5.61
1993	August	12,833	68,459	5.33
1994	June	63,764	273,242	4.29
1994	July 6-25	13,560	64,986	4.79
1994	August	9,841	54,778	5.57

Appendix C.3. Sockeye salmon seine catch information; number, weight and average weight, for the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	2,702	15,011	5.56
1983	July 6-25	42,112	254,927	6.05
1983	August	1,836	10,040	5.47
1984	June	7,785	46,717	6.00
1984	July 6-25	21,496	120,201	5.59
1984	August	25,057	138,834	5.54
1985	June	6,669	32,623	4.89
1985	July 6-25	13,333	67,067	5.03
1985	August	7,471	38,241	5.12
1986	June	19,225	104,918	5.46
1986	July 6-25	59,151	348,323	5.89
1986	August	24,769	146,830	5.93
1987	June	4,469	26,592	5.95
1987	July 6-25	114,473	826,679	7.22
1987	August	5,990	34,612	5.78
1988	June	7,757	43,321	5.58
1988	July 6-25	75,026	509,803	6.80
1988	August	7,266	39,576	5.45
1990	June	19,896	99,368	4.99
1990	July 6-25	52,113	288,622	5.54
1990	August	106,475	573,310	5.38
1991	June	15,686	78,359	5.00
1991	July 6-25	58,070	316,522	5.45
1991	August	54,245	285,526	5.26
1992	June	22,849	107,533	4.71
1992	July 6-25	128,059	821,749	6.42
1992	August	25,109	131,249	5.23
1993	June	45,641	206,982	4.54
1993	July 6-25	147,976	843,068	5.70
1993	August	29,141	153,520	5.27
1994	June	31,791	135,411	4.26
1994	July 6-25	28,049	140,174	5.00
1994	August	64,251	323,347	5.03

Appendix C.4. Sockeye salmon seine catch information; number, weight and average weight, for the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	2,609	12,471	4.78
1983	July 6-25	6,757	38,409	5.68
1983	August	6,441	33,946	5.27
1984	June	9,506	45,813	4.82
1984	July 6-25	1,718	9,596	5.59
1984	August	6,804	37,272	5.48
1985	June	1,477	6,495	4.40
1985	July 6-25	10,039	46,024	4.58
1985	August	30,181	158,283	5.24
1986	June	57,064	270,308	4.74
1986	July 6-25	22,422	125,488	5.60
1986	August	117,338	742,867	6.33
1987	June	15,218	77,426	5.09
1987	July 6-25	22,194	154,977	6.98
1987	August	17,237	100,915	5.85
1988	June	13,393	66,097	4.94
1988	July 6-25	44,751	301,160	6.73
1988	August	15,859	92,733	5.85
1990	June	6,589	29,136	4.42
1990	July 6-25	8,680	45,586	5.25
1990	August	172,968	930,238	5.38
1991	June	14,688	69,109	4.71
1991	July 6-25	16,152	85,718	5.31
1991	August	229,760	1,169,478	5.09
1992	June	29,595	131,206	4.43
1992	July 6-25	44,461	272,315	6.12
1992	August	96,715	487,058	5.04
1993	June	43,225	193,847	4.48
1993	July 6-25	38,208	209,317	5.48
1993	August	27,720	148,522	5.36
1994	June	54,272	221,755	4.09
1994	July 6-25	9,623	44,790	4.65
1994	August	91,269	447,426	4.90

Appendix C.5. Sockeye salmon seine catch information; number, weight and average weight, for the Inner and Outer Karluk Sections (statistical areas 25510-25520), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	204	920	4.51
1983	July 6-25	0	0	0.00
1983	August	0	0	0.00
1984	June	14	98	7.00
1984	July 6-25	18,176	100,539	5.53
1984	August	86,506	479,964	5.55
1985	June	2,151	9,861	4.58
1985	July 6-25	562	2,694	4.79
1985	August	432	2,094	4.85
1986	June	14,671	69,516	4.74
1986	July 6-25	92,150	517,225	5.61
1986	August	38,932	247,779	6.36
1987	June	25,755	132,378	5.14
1987	July 6-25	12,824	68,362	5.33
1987	August	281	1,679	5.98
1988	June	43	213	4.95
1988	July 6-25	7,370	47,129	6.39
1988	August	56	320	5.71
1990	June	0	0	0.00
1990	July 6-25	0	0	0.00
1990	August	160,982	872,617	5.42
1991	June	0	0	0.00
1991	July 6-25	0	0	0.00
1991	August	0	0	0.00
1992	June	29,557	134,918	4.56
1992	July 6-25	1,110	4,946	4.46
1992	August	6,247	31,777	5.09
1993	June	186,303	841,798	4.52
1993	July 6-25	56,787	301,772	5.31
1993	August	0	0	0.00
1994	June	98,912	430,958	4.36
1994	July 6-25	46,679	213,093	4.57
1994	August	2,885	13,256	4.59

Appendix C.6. Sockeye salmon seine catch information; number, weight and average weight, for the Sturgeon and Halibut Bay Sections (statistical areas 25625-25640), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	0	0	0.00
1983	August	0	0	0.00
1984	June	200	890	4.45
1984	July 6-25	21,889	123,509	5.64
1984	August	45,612	258,500	5.67
1985	June	971	4,400	4.53
1985	July 6-25	820	4,197	5.12
1985	August	0	0	0.00
1986	June	160	770	4.81
1986	July 6-25	77,894	450,036	5.78
1986	August	37,170	228,950	6.16
1987	June	8,277	43,732	5.28
1987	July 6-25	10,487	62,606	5.97
1987	August	96,757	573,286	5.93
1988	June	74,809	355,056	4.75
1988	July 6-25	187,230	1,091,323	5.83
1988	August	38,229	202,558	5.30
1990	June	400	1,900	4.75
1990	July 6-25	7,740	40,868	5.28
1990	August	427,269	2,281,750	5.34
1991	June	73,589	356,526	4.84
1991	July 6-25	182,063	965,481	5.30
1991	August	65,469	343,309	5.24
1992	June	31,959	151,960	4.75
1992	July 6-25	349,691	2,170,852	6.21
1992	August	21,961	113,651	5.18
1993	June	107,167	524,204	4.89
1993	July 6-25	11	98	8.91
1993	August	0	0	0.00
1994	June	0	0	0.00
1994	July 6-25	14,692	72,478	4.93
1994	August	13,298	66,647	5.01

Appendix C.7. Sockeye salmon seine catch information; number, weight and average weight, for the Inner and Outer Ayakulik Sections (statistical areas 25610-25620), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	31,068	163,569	5.26
1983	July 6-25	0	0	0.00
1983	August	799	4,239	5.31
1984	June	151,177	655,940	4.34
1984	July 6-25	199,542	994,482	4.98
1984	August	18,182	96,794	5.32
1985	June	370,776	1,666,391	4.49
1985	July 6-25	70,017	354,070	5.06
1985	August	60,999	290,224	4.76
1986	June	254,935	1,216,557	4.77
1986	July 6-25	70,078	391,618	5.59
1986	August	23,657	136,173	5.76
1987	June	24,414	122,460	5.02
1987	July 6-25	0	0	0.00
1987	August	1,208	6,800	5.63
1988	June	106,711	507,571	4.76
1988	July 6-25	3,341	20,333	6.09
1988	August	542	2,715	5.01
1990	June	825,288	3,869,239	4.69
1990	July 6-25	512,201	2,671,189	5.22
1990	August	32,931	175,134	5.32
1991	June	545,180	2,614,740	4.80
1991	July 6-25	307,766	1,576,316	5.12
1991	August	151,406	778,045	5.14
1992	June	366,905	1,719,846	4.69
1992	July 6-25	164,953	1,062,086	6.44
1992	August	6,893	34,270	4.97
1993	June	308,567	1,505,350	4.88
1993	July 6-25	0	0	0.00
1993	August	271	1,234	4.55
1994	June	0	0	0.00
1994	July 6-25	19,554	92,221	4.72
1994	August	16,351	78,791	4.82

Appendix C.8. Sockeye salmon seine catch information; number, weight and average weight, for the Cape Alitak Section (statistical areas 25710-25720), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	10,036	53,235	5.30
1983	July 6-25	27,399	152,207	5.56
1983	August	65,367	361,666	5.53
1984	June	3,138	14,988	4.78
1984	July 6-25	36,120	208,050	5.76
1984	August	45,791	261,457	5.71
1985	June	12,497	56,419	4.51
1985	July 6-25	20,724	93,769	4.52
1985	August	118,084	495,317	4.19
1986	June	8,615	39,196	4.55
1986	July 6-25	51,484	302,342	5.87
1986	August	294,035	1,795,568	6.11
1987	June	9,142	48,973	5.36
1987	July 6-25	38,637	254,869	6.60
1987	August	85,947	508,166	5.91
1988	June	39,843	186,504	4.68
1988	July 6-25	103,317	577,351	5.59
1988	August	223,760	1,047,962	4.68
1990	June	161,392	739,744	4.58
1990	July 6-25	132,489	643,732	4.86
1990	August	149,675	820,929	5.48
1991	June	178,967	855,661	4.78
1991	July 6-25	290,783	1,426,587	4.91
1991	August	203,650	1,077,190	5.29
1992	June	63,253	298,298	4.72
1992	July 6-25	99,079	581,250	5.87
1992	August	19,033	96,638	5.08
1993	June	151,309	726,052	4.80
1993	July 6-25	125,555	633,162	5.04
1993	August	41,923	216,395	5.16
1994	June	109,138	500,658	4.59
1994	July 6-25	133,924	627,284	4.68
1994	August	49,640	244,443	4.92

Appendix C.9. Sockeye salmon seine catch information; number, weight and average weight, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	944	5,166	5.47
1983	July 6-25	7,234	40,583	5.61
1983	August	23,031	125,290	5.44
1984	June	8	42	5.25
1984	July 6-25	1,306	7,078	5.42
1984	August	11,476	64,570	5.63
1985	June	1,670	7,594	4.55
1985	July 6-25	4,903	23,895	4.87
1985	August	44,514	189,663	4.26
1986	June	240	1,113	4.64
1986	July 6-25	38,737	219,258	5.66
1986	August	26,953	164,374	6.10
1987	June	61	356	5.84
1987	July 6-25	10,243	68,436	6.68
1987	August	15,277	90,232	5.91
1988	June	2,835	12,123	4.28
1988	July 6-25	14,388	85,864	5.97
1988	August	5,545	27,873	5.03
1990	June	8,495	38,745	4.56
1990	July 6-25	5,939	32,753	5.51
1990	August	0	0	0.00
1991	June	20,401	96,774	4.74
1991	July 6-25	10,312	52,116	5.05
1991	August	83,396	435,608	5.22
1992	June	8,532	39,427	4.62
1992	July 6-25	10,933	73,562	6.73
1992	August	0	0	0.00
1993	June	944	5,166	5.47
1993	July 6-25	7,234	40,583	5.61
1993	August	23,031	125,290	5.44
1994	June	26,469	117,151	4.43
1994	July 6-25	24,284	116,004	4.78
1994	August	11,196	58,486	5.22

Appendix C.10. Sockeye salmon seine catch information; number, weight and average weight, for the Seven River and Two-Headed Sections (statistical areas 25854-25890), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	2,265	11,424	5.04
1983	August	698	3,612	5.17
1984	June	0	0	0.00
1984	July 6-25	2,441	8,202	3.36
1984	August	0	0	0.00
1985	June	0	0	0.00
1985	July 6-25	3,048	12,355	4.05
1985	August	25	112	4.48
1986	June	0	0	0.00
1986	July 6-25	220	818	3.72
1986	August	1,439	6,834	4.75
1987	June	0	0	0.00
1987	July 6-25	2,101	12,773	6.08
1987	August	2,694	15,437	5.73
1988	June	64	345	5.39
1988	July 6-25	1,309	6,796	5.19
1988	August	2,080	10,844	5.21
1990	June	297	1,382	4.65
1990	July 6-25	1,287	7,483	5.81
1990	August	825	4,534	5.50
1991	June	0	0	0.00
1991	July 6-25	9,229	49,821	5.40
1991	August	8,590	41,561	4.84
1992	June	732	3,711	5.07
1992	July 6-25	52,554	340,558	6.48
1992	August	1,477	7,997	5.41
1993	June	17,357	89,741	5.17
1993	July 6-25	58,868	304,158	5.17
1993	August	10,626	57,859	5.45
1994	June	16,099	78,031	4.85
1994	July 6-25	27,599	137,974	5.00
1994	August	184	982	5.34

Appendix C.11. Sockeye salmon seine catch information; number, weight and average weight, for the Sitkalidak Section (statistical areas 25810-25853), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	3,608	20,068	5.56
1983	August	544	2,595	4.77
1984	June	0	0	0.00
1984	July 6-25	1,851	10,361	5.60
1984	August	537	3,234	6.02
1985	June	149	892	5.99
1985	July 6-25	7,576	37,451	4.94
1985	August	829	3,707	4.47
1986	June	0	0	0.00
1986	July 6-25	11,643	70,424	6.05
1986	August	1,839	11,613	6.31
1987	June	23	159	6.91
1987	July 6-25	5,759	40,110	6.96
1987	August	927	5,003	5.40
1988	June	692	3,812	5.51
1988	July 6-25	49,155	324,880	6.61
1988	August	4,807	25,090	5.22
1990	June	5,142	24,267	4.72
1990	July 6-25	54,852	352,528	6.43
1990	August	9,517	51,828	5.45
1991	June	7,112	39,651	5.58
1991	July 6-25	174,666	884,294	5.06
1991	August	20,253	104,736	5.17
1992	June	7,821	40,818	5.22
1992	July 6-25	429,642	2,715,124	6.32
1992	August	5,002	25,452	5.09
1993	June	36,087	180,854	5.01
1993	July 6-25	113,206	599,656	5.30
1993	August	25,647	106,186	4.14
1994	June	1,244	6,263	5.03
1994	July 6-25	35,438	183,293	5.17
1994	August	4,334	20,623	4.76

Appendix C.12. Sockeye salmon seine catch information; number, weight and average weight, for the Inner and Outer Ugak Bay Sections (statistical areas 25940-25942), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	971	5,285	5.44
1983	July 6-25	4,137	21,978	5.31
1983	August	258	1,686	6.53
1984	June	6,493	38,897	5.99
1984	July 6-25	10,395	62,750	6.04
1984	August	14	81	5.79
1985	June	2,149	11,345	5.28
1985	July 6-25	1,372	7,179	5.23
1985	August	18	133	7.39
1986	June	0	0	0.00
1986	July 6-25	18,321	116,028	6.33
1986	August	16	87	5.44
1987	June	0	0	0.00
1987	July 6-25	3,327	16,680	5.01
1987	August	1	8	8.00
1988	June	1,186	7,331	6.18
1988	July 6-25	12,147	73,686	6.07
1988	August	30	146	4.87
1990	June	93	430	4.62
1990	July 6-25	11,875	65,728	5.53
1990	August	40	220	5.50
1991	June	0	0	0.00
1991	July 6-25	13,022	69,779	5.36
1991	August	40	186	4.65
1992	June	105	527	5.02
1992	July 6-25	73,044	454,581	6.22
1992	August	395	2,301	5.83
1993	June	4,433	22,536	5.08
1993	July 6-25	63,029	343,802	5.45
1993	August	411	2,194	5.34
1994	June	449	2,157	4.80
1994	July 6-25	13,137	66,496	5.06
1994	August	426	2,069	4.86

Appendix C.13. Sockeye salmon seine catch information; number, weight and average weight, for the Northeast Kodiak District (statistical areas 25910-25925), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	888	5,413	6.10
1983	August	240	1,236	5.15
1984	June	0	0	0.00
1984	July 6-25	662	2,434	3.68
1984	August	98	457	4.66
1985	June	0	0	0.00
1985	July 6-25	164	846	5.16
1985	August	205	992	4.84
1986	June	0	0	0.00
1986	July 6-25	125	621	4.97
1986	August	146	745	5.10
1987	June	0	0	0.00
1987	July 6-25	60	349	5.82
1987	August	394	2,392	6.07
1988	June	0	0	0.00
1988	July 6-25	263	1,699	6.46
1988	August	153	752	4.92
1990	June	0	0	0.00
1990	July 6-25	5	24	4.80
1990	August	97	504	5.20
1991	June	0	0	0.00
1991	July 6-25	13,804	69,915	5.06
1991	August	114	609	5.34
1992	June	0	0	0.00
1992	July 6-25	49,835	312,579	6.27
1992	August	319	1,918	6.01
1993	June	0	0	0.00
1993	July 6-25	6,635	35,964	5.42
1993	August	51	253	4.96
1994	June	500	2,251	4.50
1994	July 6-25	3,301	16,712	5.06
1994	August	83	425	5.12

Appendix C.14. Sockeye salmon seine catch information; number, weight and average weight, for the Central Section, east, and North Cape Section, (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	695	4,044	5.82
1983	July 6-25	1,952	10,885	5.58
1983	August	236	1,139	4.83
1984	June	1,914	9,641	5.04
1984	July 6-25	2,585	12,992	5.03
1984	August	157	810	5.16
1985	June	391	1,831	4.68
1985	July 6-25	6,141	30,097	4.90
1985	August	829	4,349	5.25
1986	June	785	3,804	4.85
1986	July 6-25	11,868	70,312	5.92
1986	August	1,510	8,282	5.48
1987	June	3,926	21,567	5.49
1987	July 6-25	8,818	59,217	6.72
1987	August	1,334	7,635	5.72
1988	June	10,880	51,624	4.74
1988	July 6-25	16,920	108,744	6.43
1988	August	2,353	13,049	5.55
1990	June	4,098	18,547	4.53
1990	July 6-25	10,010	54,571	5.45
1990	August	1,436	7,497	5.22
1991	June	5,683	28,876	5.08
1991	July 6-25	8,115	40,521	4.99
1991	August	323	1,581	4.89
1992	June	9,576	46,507	4.86
1992	July 6-25	6,805	43,882	6.45
1992	August	485	2,790	5.75
1993	June	20,826	101,797	4.89
1993	July 6-25	6,145	35,211	5.73
1993	August	283	1,602	5.66
1994	June	3,927	18,716	4.77
1994	July 6-25	11,433	55,959	4.89
1994	August	856	4,575	5.34

Appendix C.15. Sockeye salmon seine catch information; number, weight and average weight, for the Southeast Afognak Section (statistical areas 25233-25235), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	3,826	15,520	4.06
1983	July 6-25	1,953	10,392	5.32
1983	August	59	264	4.47
1984	June	5,879	25,786	4.39
1984	July 6-25	1,077	5,396	5.01
1984	August	173	828	4.79
1985	June	1,861	6,712	3.61
1985	July 6-25	2,145	10,804	5.04
1985	August	867	5,189	5.99
1986	June	1,346	5,721	4.25
1986	July 6-25	2,716	16,334	6.01
1986	August	823	4,744	5.76
1987	June	1,309	5,798	4.43
1987	July 6-25	3,601	24,609	6.83
1987	August	708	3,849	5.44
1988	June	806	3,905	4.84
1988	July 6-25	411	2,530	6.16
1988	August	471	2,416	5.13
1990	June	18,033	65,590	3.64
1990	July 6-25	4,829	19,813	4.10
1990	August	343	1,824	5.32
1991	June	40,193	174,627	4.34
1991	July 6-25	7,437	33,713	4.53
1991	August	19	105	5.53
1992	June	347	1,305	3.76
1992	July 6-25	11,640	73,768	6.34
1992	August	93	471	5.06
1993	June	1,793	8,035	4.48
1993	July 6-25	7,927	43,367	5.47
1993	August	439	2,146	4.89
1994	June	12,068	44,519	3.69
1994	July 6-25	1,040	5,596	5.38
1994	August	204	1,062	5.21

Appendix C. 16. Sockeye salmon seine catch information; number, weight and average weight, for the Duck, Izhut and Kitoi Bay Sections (statistical areas 25230-25232), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	1,060	5,131	4.84
1983	July 6-25	6,201	29,461	4.75
1983	August	580	2,975	5.13
1984	June	2,945	13,309	4.52
1984	July 6-25	1,587	7,766	4.89
1984	August	717	3,431	4.79
1985	June	351	1,513	4.31
1985	July 6-25	5,757	28,416	4.94
1985	August	5,119	24,038	4.70
1986	June	0	0	0.00
1986	July 6-25	237	1,500	6.33
1986	August	2,211	10,854	4.91
1987	June	0	0	0.00
1987	July 6-25	7,092	45,708	6.45
1987	August	3,546	20,592	5.81
1988	June	0	0	0.00
1988	July 6-25	3,288	21,306	6.48
1988	August	537	2,668	4.97
1990	June	0	0	0.00
1990	July 6-25	978	5,324	5.44
1990	August	2,714	13,488	4.97
1991	June	2,160	9,846	4.56
1991	July 6-25	3,504	17,466	4.98
1991	August	2,757	12,723	4.61
1992	June	810	4,081	5.04
1992	July 6-25	17,789	99,128	5.57
1992	August	2,564	12,989	5.07
1993	June	329	1,725	5.24
1993	July 6-25	18,705	98,233	5.25
1993	August	7,319	37,021	5.06
1994	June	1,335	5,949	4.46
1994	July 6-25	4,593	24,482	5.33
1994	August	7,368	37,906	5.14

Appendix C.17. Sockeye salmon seine catch information; number, weight and average weight, for the Northeast Afognak and Perenosia Sections (statistical areas 25181-25220), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	5,608	24,624	4.39
1983	July 6-25	83	455	5.48
1983	August	14	70	5.00
1984	June	5,700	26,105	4.58
1984	July 6-25	678	3,624	5.35
1984	August	9	50	5.56
1985	June	2,079	9,194	4.42
1985	July 6-25	0	0	0.00
1985	August	2,065	9,707	4.70
1986	June	0	0	0.00
1986	July 6-25	938	4,403	4.69
1986	August	351	1,979	5.64
1987	June	170	772	4.54
1987	July 6-25	119	716	6.02
1987	August	391	2,669	6.83
1988	June	365	1,823	4.99
1988	July 6-25	1,654	10,271	6.21
1988	August	976	5,408	5.54
1990	June	269	1,189	4.42
1990	July 6-25	80	426	5.33
1990	August	1,326	7,068	5.33
1991	June	0	0	0.00
1991	July 6-25	1,262	6,482	5.14
1991	August	138	720	5.22
1992	June	0	0	0.00
1992	July 6-25	7,362	44,318	6.02
1992	August	198	1,012	5.11
1993	June	1,534	8,187	5.34
1993	July 6-25	2,656	13,638	5.13
1993	August	2,204	11,743	5.33
1994	June	0	0	0.00
1994	July 6-25	1,392	6,994	5.02
1994	August	744	3,914	5.26

Appendix C.18. Sockeye salmon seine catch information; number, weight and average weight, for the Big River, Hallo Bay, Inner and Outer Kukak Bay and Dakavak Bay Sections (statistical areas 26210-26255), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	2,815	12,133	4.31
1983	August	6,359	25,725	4.05
1984	June	5,606	20,150	3.59
1984	July 6-25	1,397	5,666	4.06
1984	August	897	4,052	4.52
1985	June	10,513	48,681	4.63
1985	July 6-25	7,419	37,991	5.12
1985	August	1,894	7,936	4.19
1986	June	427	1,708	4.00
1986	July 6-25	9,139	45,249	4.95
1986	August	3,806	17,223	4.53
1987	June	694	3,223	4.64
1987	July 6-25	10,219	61,361	6.00
1987	August	7,566	40,553	5.36
1988	June	6,393	28,609	4.48
1988	July 6-25	207,492	1,460,296	7.04
1988	August	1,389	6,377	4.59
1990	June	3,408	12,880	3.78
1990	July 6-25	52,557	328,472	6.25
1990	August	6,185	31,224	5.05
1991	June	2,448	8,599	3.51
1991	July 6-25	11,604	65,002	5.60
1991	August	6,238	30,710	4.92
1992	June	230	1,158	5.03
1992	July 6-25	118,175	783,894	6.63
1992	August	13,937	84,916	6.09
1993	June	312	1,446	4.63
1993	July 6-25	60,541	369,080	6.10
1993	August	1,640	8,957	5.46
1994	June	0	0	0.00
1994	July 6-25	33,852	194,960	5.76
1994	August	866	4,346	5.02

Appendix C.19. Sockeye salmon seine catch information; number, weight and average weight, for the Katmai and Alinchak Bay Sections (statistical areas 26260-26270), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	0	0	0.00
1983	July 6-25	0	0	0.00
1983	August	8	50	6.25
1984	June	18,516	113,152	6.11
1984	July 6-25	55	285	5.18
1984	August	629	2,391	3.80
1985	June	0	0	0.00
1985	July 6-25	16	65	4.06
1985	August	87	420	4.83
1986	June	0	0	0.00
1986	July 6-25	2,093	13,311	6.36
1986	August	1,324	5,992	4.53
1987	June	229	1,480	6.46
1987	July 6-25	15,824	102,112	6.45
1987	August	83	491	5.92
1988	June	0	0	0.00
1988	July 6-25	27,936	193,154	6.91
1988	August	300	1,657	5.52
1990	June	0	0	0.00
1990	July 6-25	23,276	138,025	5.93
1990	August	1,101	5,911	5.37
1991	June	1,993	12,182	6.11
1991	July 6-25	1,570	8,164	5.20
1991	August	919	4,159	4.53
1992	June	0	0	0.00
1992	July 6-25	98,051	613,163	6.25
1992	August	564	3,105	5.51
1993	June	0	0	0.00
1993	July 6-25	18,291	104,244	5.70
1993	August	2,100	11,539	5.49
1994	June	0	0	0.00
1994	July 6-25	37,943	208,190	5.49
1994	August	2	10	5.00

Appendix C.20. Sockeye salmon set gillnet catch information; number, weight and average weight, for the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	3,784	20,352	5.3784
1983	July 6-25	42,356	249,807	5.8978
1983	August	8,338	50,490	6.0554
1984	June	15,089	84,173	5.5784
1984	July 6-25	30,091	176,527	5.8664
1984	August	27,513	160,472	5.8326
1985	June	15,826	82,462	5.2105
1985	July 6-25	23,544	131,526	5.5864
1985	August	32,314	179,893	5.5670
1986	June	29,560	161,791	5.4733
1986	July 6-25	65,285	390,238	5.9775
1986	August	46,990	288,405	6.1376
1987	June	16,775	97,453	5.8094
1987	July 6-25	38,546	249,252	6.4664
1987	August	31,018	188,093	6.0640
1988	June	14,425	80,771	5.5994
1988	July 6-25	43,195	276,764	6.4073
1988	August	19,601	115,753	5.9055
1990	June	30,724	160,823	5.2344
1990	July 6-25	52,737	306,723	5.8161
1990	August	184,681	1,050,738	5.6895
1991	June	41,296	210,016	5.0856
1991	July 6-25	71,215	406,099	5.7024
1991	August	105,082	567,478	5.4003
1992	June	68,688	347,782	5.0632
1992	July 6-25	50,054	304,212	6.0777
1992	August	50,431	264,470	5.2442
1993	June	180,881	882,621	4.8796
1993	July 6-25	116,007	639,888	5.5159
1993	August	60,102	327,478	5.4487
1994	June	68,435	344,264	5.0305
1994	July 6-25	38,748	204,496	5.2776
1994	August	73,111	389,120	5.3223

Appendix C.21. Sockeye salmon set gillnet catch information; number, weight and average weight, for the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	6,417	33,790	5.27
1983	July 6-25	47,046	291,733	6.20
1983	August	28,716	164,332	5.72
1984	June	15,160	84,660	5.58
1984	July 6-25	33,295	194,674	5.85
1984	August	35,308	202,399	5.73
1985	June	14,707	75,137	5.11
1985	July 6-25	25,272	139,785	5.53
1985	August	53,220	292,371	5.49
1986	June	47,304	246,899	5.22
1986	July 6-25	77,140	445,723	5.78
1986	August	110,778	690,014	6.23
1987	June	22,512	127,209	5.65
1987	July 6-25	26,389	166,385	6.31
1987	August	32,821	198,406	6.05
1988	June	16,020	86,191	5.38
1988	July 6-25	30,620	185,810	6.07
1988	August	27,903	164,233	5.89
1990	June	28,275	149,305	5.28
1990	July 6-25	44,905	249,700	5.56
1990	August	195,478	1,104,613	5.65
1991	June	21,203	106,095	5.00
1991	July 6-25	63,093	359,202	5.69
1991	August	213,010	1,140,290	5.35
1992	June	91,312	449,710	4.92
1992	July 6-25	30,680	185,069	6.03
1992	August	63,874	335,306	5.25
1993	June	167,802	810,805	4.83
1993	July 6-25	119,524	713,368	5.97
1993	August	59,747	325,895	5.45
1994	June	80,128	394,033	4.92
1994	July 6-25	35,282	188,873	5.35
1994	August	85,629	455,582	5.32

Appendix C.22. Sockeye salmon set gillnet catch information; number, weight and average weight, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	13,500	73,834	5.47
1983	July 6-25	28,397	157,223	5.54
1983	August	122,160	698,625	5.72
1984	June	5,574	30,235	5.42
1984	July 6-25	48,998	294,649	6.01
1984	August	79,699	465,346	5.84
1985	June	26,544	124,532	4.69
1985	July 6-25	13,609	64,388	4.73
1985	August	211,820	973,090	4.59
1986	June	13,465	62,790	4.66
1986	July 6-25	50,260	301,703	6.00
1986	August	210,964	1,305,200	6.19
1987	June	7,252	40,428	5.57
1987	July 6-25	27,186	169,304	6.23
1987	August	116,336	698,497	6.00
1988	June	51,319	244,947	4.77
1988	July 6-25	96,608	530,438	5.49
1988	August	164,143	885,639	5.40
1990	June	134,225	640,891	4.77
1990	July 6-25	92,834	460,430	4.96
1990	August	160,318	902,106	5.63
1991	June	176,317	871,112	4.94
1991	July 6-25	131,006	657,627	5.02
1991	August	228,687	1,246,837	5.45
1992	June	45,527	218,424	4.80
1992	July 6-25	70,853	407,959	5.76
1992	August	22,179	118,318	5.33
1993	June	170,642	829,013	4.86
1993	July 6-25	89,095	436,611	4.90
1993	August	50,512	267,119	5.29
1994	June	94,181	453,805	4.82
1994	July 6-25	100,111	501,049	5.00
1994	August	81,880	439,478	5.37

Appendix C.23. Sockeye salmon set gillnet catch information; number, weight and average weight, for the Outer Akalura, Outer Upper Station, Dog Salmon Flats and Olga Bay Sections, (statistical areas 25730-25740), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	25,476	132,270	5.19
1983	July 6-25	17,277	93,859	5.43
1983	August	32,118	176,970	5.51
1984	June	6,251	31,804	5.09
1984	July 6-25	21,692	128,529	5.93
1984	August	29,528	171,116	5.80
1985	June	49,519	228,391	4.61
1985	July 6-25	12,074	55,417	4.59
1985	August	62,566	279,789	4.47
1986	June	59,597	274,391	4.60
1986	July 6-25	31,675	172,861	5.46
1986	August	261,202	1,597,615	6.12
1987	June	48,915	267,236	5.46
1987	July 6-25	14,679	86,733	5.91
1987	August	41,141	244,894	5.95
1988	June	71,407	346,087	4.85
1988	July 6-25	53,652	272,615	5.08
1988	August	108,544	535,043	4.93
1990	June	113,395	525,934	4.64
1990	July 6-25	20,676	90,037	4.35
1990	August	50,197	277,283	5.52
1991	June	60,309	294,816	4.89
1991	July 6-25	220,227	999,959	4.54
1991	August	44,907	244,164	5.44
1992	June	28,297	134,942	4.77
1992	July 6-25	14,381	74,762	5.20
1992	August	14,086	72,683	5.16
1993	June	84,191	406,885	4.83
1993	July 6-25	16,958	78,068	4.60
1993	August	5,188	25,471	4.91
1994	June	41,180	196,141	4.76
1994	July 6-25	30,953	145,776	4.71
1994	August	41,317	214,324	5.19

Appendix C.24. Sockeye salmon set gillnet catch information; number, weight and average weight, for the Central Section, east, and North Cape Section, (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Time Period	Catch Number	Catch Weight (lbs)	Average Weight (lbs)
1983	June	1,576	8,430	5.35
1983	July 6-25	2,334	12,883	5.52
1983	August	314	1,662	5.29
1984	June	982	5,555	5.66
1984	July 6-25	2,254	13,056	5.79
1984	August	372	2,235	6.01
1985	June	1,576	7,833	4.97
1985	July 6-25	2,301	12,314	5.35
1985	August	1,248	6,654	5.33
1986	June	1,907	10,146	5.32
1986	July 6-25	6,343	38,245	6.03
1986	August	1,437	8,478	5.90
1987	June	1,244	6,741	5.42
1987	July 6-25	3,517	23,820	6.77
1987	August	1,042	6,537	6.27
1988	June	3,391	17,131	5.05
1988	July 6-25	5,922	37,606	6.35
1988	August	1,438	8,724	6.07
1990	June	1,943	8,896	4.58
1990	July 6-25	4,435	24,871	5.61
1990	August	3,036	16,366	5.39
1991	June	2,241	11,963	5.34
1991	July 6-25	5,125	27,298	5.33
1991	August	1,091	5,789	5.31
1992	June	5,227	26,083	4.99
1992	July 6-25	11,191	70,916	6.34
1992	August	683	3,711	5.43
1993	June	15,339	77,039	5.02
1993	July 6-25	10,409	59,251	5.69
1993	August	1,584	8,566	5.41
1994	June	6,624	34,739	5.24
1994	July 6-25	2,864	16,371	5.72
1994	August	2,691	14,662	5.45

APPENDIX D. ESTIMATED AVERAGE WEIGHT OF LOCAL (KODIAK) AND UCI SOCKEYE SALMON AND CORRESPONDING HARVEST STOCK COMPOSITION ESTIMATES, JULY 6-25, BASED ON AVERAGE WEIGHT DIFFERENCES, BY AREA AND YEAR (1983-1994, EXCEPT 1989)

Appendix D.1. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Northwest Afognak and Shuyak Island Sections (statistical areas 25130-25170).

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.58	1.90	72%	7,741	2,978	0	10,719
1984	5.95	4.38	1.57	49%	1,090	1,114	0	2,204
1985	5.66	4.31	1.34	-24%	0	1,116	0	1,116
1986	5.77	4.64	1.14	142%	113	0	0	113
1987	6.74	5.35	1.39	89%	4,749	595	0	5,344
1988	6.64	5.15	1.49	146%	183,994	0	0	183,994
1990	6.44	5.16	1.28	-49%	0	5,157	0	5,157
1991	5.65	4.78	0.86	67%	4,822	2,381	0	7,203
1992	6.60	4.41	2.19	69%	7,083	3,110	0	10,193
1993	5.89	4.69	1.19	54%	9,659	8,215	0	17,874
1994	5.69	4.51	1.18	-13%	0	4,315	0	4,315

Appendix D.2. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Southwest Afognak Section (statistical areas 25110-25120), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.93	0.55	31%	5,926	12,992	0	18,918
1984	5.95	5.65	0.29	Unassessed	0	0	14,047	14,047
1985	5.66	5.19	0.46	Unassessed	0	0	1,740	1,740
1986	5.77	5.57	0.20	Unassessed	0	0	20,680	20,680
1987	6.74	6.57	0.17	Unassessed	0	0	45,869	45,869
1988	6.64	5.87	0.78	172%	86,649	0	0	86,649
1990	6.44	5.41	1.03	10%	2,179	20,512	0	22,691
1991	5.65	5.11	0.54	92%	31,395	2,788	0	34,183
1992	6.60	4.78	1.82	78%	38,578	11,161	0	49,739
1993	5.89	4.64	1.25	78%	57,368	16,599	0	73,967
1994	5.69	4.46	1.23	27%	3,690	9,870	0	13,560

Appendix D.3. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.52	0.96	56%	23,461	18,651	0	42,112
1984	5.95	5.65	0.30	Unassessed	0	0	21,496	21,496
1985	5.66	5.01	0.65	3%	383	12,950	0	13,333
1986	5.77	5.72	0.05	Unassessed	0	0	59,151	59,151
1987	6.74	5.85	0.89	154%	114,473	0	0	114,473
1988	6.64	5.52	1.12	114%	75,026	0	0	75,026
1990	6.44	5.32	1.11	19%	10,065	42,048	0	52,113
1991	5.65	5.20	0.44	Unassessed	0	0	58,070	58,070
1992	6.60	4.98	1.62	89%	113,557	14,502	0	128,059
1993	5.89	4.82	1.07	82%	121,654	26,322	0	147,976
1994	5.69	4.78	0.91	24%	6,773	21,276	0	28,049

Appendix D.4. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.13	1.35	41%	2,783	3,974	0	6,757
1984	5.95	5.09	0.85	58%	989	729	0	1,718
1985	5.66	5.20	0.45	Unassessed	0	0	10,039	10,039
1986	5.77	5.81	-0.04	Unassessed	0	0	22,422	22,422
1987	6.74	5.50	1.24	120%	22,194	0	0	22,194
1988	6.64	5.43	1.21	107%	44,751	0	0	44,751
1990	6.44	5.34	1.09	-8%	0	8,680	0	8,680
1991	5.65	5.07	0.58	41%	6,701	9,451	0	16,152
1992	6.60	4.89	1.71	72%	32,060	12,401	0	44,461
1993	5.89	4.83	1.06	61%	23,494	14,714	0	38,208
1994	5.69	4.60	1.09	5%	498	9,125	0	9,623

Appendix D.5. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Inner and Outer Karluk Sections (statistical areas 25510-25520), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.51	1.97	NA ^a	0	0	0	0
1984	5.95	5.55	0.40	Unassessed	0	0	18,176	18,176
1985	5.66	4.63	1.03	16%	90	472	0	562
1986	5.77	5.92	-0.15	Unassessed	0	0	92,150	92,150
1987	6.74	5.15	1.59	11%	1,467	11,357	0	12,824
1988	6.64	5.38	1.26	80%	5,918	1,452	0	7,370
1990	6.44	5.42	1.02	NA ^a	0	0	0	0
1991	5.65	NA ^b	NA ^b	NA ^b	0	0	0	0
1992	6.60	4.66	1.94	-10%	0	1,110	0	1,110
1993	5.89	4.52	1.37	58%	33,015	23,772	0	56,787
1994	5.69	4.36	1.33	15%	7,081	39,598	0	46,679

^a No sockeye harvest during July 6-25 for that year.

^b No sockeye harvest for that year.

Appendix D.6. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Sturgeon and Halibut Bay Sections (statistical areas 25625-25640), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	NA ^a	NA ^a	NA ^a	0	0	0	0
1984	5.95	5.66	0.29	Unassessed	0	0	21,889	21,889
1985	5.66	4.53	1.13	52%	427	393	0	820
1986	5.77	6.15	-0.38	Unassessed	0	0	77,894	77,894
1987	6.74	5.87	0.86	11%	1,157	9,330	0	10,487
1988	6.64	4.93	1.71	52%	98,093	89,137	0	187,230
1990	6.44	5.34	1.10	-5%	0	7,740	0	7,740
1991	5.65	5.03	0.61	44%	80,297	101,766	0	182,063
1992	6.60	4.93	1.67	77%	267,689	82,002	0	349,691
1993	5.89	4.89	1.00	404%	11	0	0	11
1994	5.69	5.01	0.68	-12%	0	14,692	0	14,692

^a No sockeye harvested for that year.

Appendix D.7. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Inner and Outer Ayakulik Sections (statistical areas 25610-25620), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.27	1.21	NA ^a	0	0	0	0
1984	5.95	4.44	1.50	36%	71,588	127,954	0	199,542
1985	5.66	4.53	1.13	47%	32,658	37,359	0	70,017
1986	5.77	4.86	0.92	80%	56,007	14,071	0	70,078
1987	6.74	5.04	1.69	NA ^a	0	0	0	0
1988	6.64	4.76	1.89	70%	2,354	987	0	3,341
1990	6.44	4.71	1.73	29%	149,194	363,007	0	512,201
1991	5.65	4.87	0.78	32%	99,759	208,007	0	307,766
1992	6.60	4.69	1.91	92%	150,957	13,996	0	164,953
1993	5.89	4.88	1.01	NA ^a	0	0	0	0
1994	5.69	4.82	0.87	-12%	0	19,554	0	19,554

^a No sockeye harvest during July 6-25 for that year.

Appendix D.8. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Cape Alitak Section (statistical areas 25710-25720), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.50	0.98	5%	1,482	25,917	0	27,399
1984	5.95	5.65	0.30	Unassessed	0	0	36,120	36,120
1985	5.66	4.23	1.43	21%	4,331	16,393	0	20,724
1986	5.77	6.06	-0.29	Unassessed	0	0	51,484	51,484
1987	6.74	5.86	0.88	84%	32,372	6,265	0	38,637
1988	6.64	4.68	1.96	46%	47,716	55,601	0	103,317
1990	6.44	5.02	1.42	-11%	0	132,489	0	132,489
1991	5.65	5.05	0.59	-25%	0	290,783	0	290,783
1992	6.60	4.80	1.80	59%	58,696	40,383	0	99,079
1993	5.89	4.88	1.01	16%	20,595	104,960	0	125,555
1994	5.69	4.69	1.00	-1%	0	133,924	0	133,924

Appendix D.9. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.44	1.04	16%	1,178	6,056	0	7,234
1984	5.95	5.63	0.32	Unassessed	0	0	1,306	1,306
1985	5.66	4.27	1.39	43%	2,130	2,773	0	4,903
1986	5.77	6.09	-0.31	Unassessed	0	0	38,737	38,737
1987	6.74	5.91	0.83	93%	9,530	713	0	10,243
1988	6.64	4.77	1.87	64%	9,194	5,194	0	14,388
1990	6.44	4.56	1.88	51%	3,018	2,921	0	5,939
1991	5.65	5.13	0.52	-15%	0	10,312	0	10,312
1992	6.60	4.62	1.98	106%	10,933	0	0	10,933
1993	5.89	5.44	0.45	Unassessed	0	0	7,234	7,234
1994	5.69	4.66	1.03	11%	2,689	21,595	0	24,284

Appendix D.10. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Seven River and Two-Headed Sections (statistical areas 25854-25890), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.17	1.30	-10%	0	2,265	0	2,265
1984	5.95	NA ^a	NA ^a	NA ^a	0	0	2,441	2,441
1985	5.66	4.48	1.18	-36%	0	3,048	0	3,048
1986	5.77	4.75	1.02	-101%	0	220	0	220
1987	6.74	5.73	1.01	35%	727	1,374	0	2,101
1988	6.64	5.22	1.42	-2%	0	1,309	0	1,309
1990	6.44	5.27	1.17	46%	598	689	0	1,287
1991	5.65	4.84	0.81	69%	6,402	2,827	0	9,229
1992	6.60	5.30	1.30	91%	47,687	4,867	0	52,554
1993	5.89	5.27	0.61	-18%	0	58,868	0	58,868
1994	5.69	4.85	0.84	17%	4,830	22,769	0	27,599

^a No sockeye harvested that year.

Appendix D.11. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Sitkalidak Section (statistical areas 25810-25853), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.77	1.71	46%	1,673	1,935	0	3,608
1984	5.95	6.02	-0.07	Unassessed	0	0	1,851	1,851
1985	5.66	4.70	0.96	25%	1,910	5,666	0	7,576
1986	5.77	6.31	-0.54	49%	5,714	5,929	0	11,643
1987	6.74	5.43	1.31	117%	5,759	0	0	5,759
1988	6.64	5.26	1.39	98%	47,968	1,187	0	49,155
1990	6.44	5.19	1.25	99%	54,363	489	0	54,852
1991	5.65	5.28	0.37	Unassessed	0	0	174,666	174,666
1992	6.60	5.17	1.43	80%	345,337	84,305	0	429,642
1993	5.89	4.65	1.24	52%	59,231	53,975	0	113,206
1994	5.69	4.82	0.87	40%	14,328	21,110	0	35,438

Appendix D. 12. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Inner and Outer Ugak Bay Sections (statistical areas 25940-25942), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.67	0.81	-45%	0	4,137	0	4,137
1984	5.95	5.99	-0.04	Unassessed	0	0	10,395	10,395
1985	5.66	5.30	0.36	Unassessed	0	0	1,372	1,372
1986	5.77	5.44	0.33	Unassessed	0	0	18,321	18,321
1987	6.74	8.00	-1.26	237%	0	3,327	0	3,327
1988	6.64	6.15	0.49	Unassessed	0	0	12,147	12,147
1990	6.44	4.89	1.55	42%	4,960	6,915	0	11,875
1991	5.65	4.65	1.00	71%	9,267	3,755	0	13,022
1992	6.60	5.66	0.94	60%	43,875	29,169	0	73,044
1993	5.89	5.11	0.78	45%	28,170	34,859	0	63,029
1994	5.69	4.83	0.86	27%	3,538	9,599	0	13,137

Appendix D. 13. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Northeast Kodiak District (statistical areas 25910-25925), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.15	1.33	71%	633	255	0	888
1984	5.95	4.66	1.28	-77%	0	662	0	662
1985	5.66	4.84	0.82	39%	64	100	0	164
1986	5.77	5.10	0.67	-20%	0	125	0	125
1987	6.74	6.07	0.67	-38%	0	60	0	60
1988	6.64	4.92	1.73	89%	235	28	0	263
1990	6.44	5.20	1.24	-32%	0	5	0	5
1991	5.65	5.34	0.30	Unassessed	0	0	13,804	13,804
1992	6.60	6.01	0.59	44%	22,012	27,823	0	49,835
1993	5.89	4.96	0.93	50%	3,292	3,343	0	6,635
1994	5.69	4.59	1.10	43%	1,417	1,884	0	3,301

Appendix D.14. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.57	0.91	1%	20	1,932	0	1,952
1984	5.95	5.05	0.90	-2%	0	2,585	0	2,585
1985	5.66	5.07	0.59	-28%	0	6,141	0	6,141
1986	5.77	5.27	0.51	130%	11,868	0	0	11,868
1987	6.74	5.55	1.19	98%	8,642	176	0	8,818
1988	6.64	4.89	1.76	88%	14,840	2,080	0	16,920
1990	6.44	4.71	1.73	43%	4,309	5,701	0	10,010
1991	5.65	5.07	0.57	-14%	0	8,115	0	8,115
1992	6.60	4.90	1.70	91%	6,196	609	0	6,805
1993	5.89	4.90	0.99	84%	5,169	976	0	6,145
1994	5.69	4.87	0.82	3%	348	11,085	0	11,433

Appendix D.15. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Southeast Afognak Section (statistical areas 25233-25235), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.06	2.41	52%	1,018	935	0	1,953
1984	5.95	4.40	1.55	40%	426	651	0	1,077
1985	5.66	4.36	1.30	52%	1,117	1,028	0	2,145
1986	5.77	4.82	0.95	125%	2,716	0	0	2,716
1987	6.74	4.78	1.96	105%	3,601	0	0	3,601
1988	6.64	4.95	1.69	71%	293	118	0	411
1990	6.44	3.67	2.77	16%	757	4,072	0	4,829
1991	5.65	4.35	1.30	14%	1,075	6,362	0	7,437
1992	6.60	4.04	2.56	90%	10,445	1,195	0	11,640
1993	5.89	4.56	1.33	69%	5,438	2,489	0	7,927
1994	5.69	3.71	1.98	84%	877	163	0	1,040

Appendix D.16. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Duck, Izhut and Kitoi Bay Sections (statistical areas 25230-25232), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.94	1.53	-12%	0	6,201	0	6,201
1984	5.95	4.57	1.38	23%	372	1,215	0	1,587
1985	5.66	4.67	0.99	27%	1,545	4,212	0	5,757
1986	5.77	4.91	0.86	164%	237	0	0	237
1987	6.74	5.81	0.93	68%	4,854	2,238	0	7,092
1988	6.64	4.97	1.67	90%	2,968	320	0	3,288
1990	6.44	4.97	1.47	32%	316	662	0	978
1991	5.65	4.59	1.06	37%	1,310	2,194	0	3,504
1992	6.60	5.06	1.54	33%	5,923	11,866	0	17,789
1993	5.89	5.07	0.82	23%	4,228	14,477	0	18,705
1994	5.69	5.04	0.65	45%	2,051	2,542	0	4,593

Appendix D.17. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Northeast Afognak and Perenosa Sections (statistical areas 25181-25220), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.39	2.09	52%	43	40	0	83
1984	5.95	4.58	1.37	56%	379	299	0	678
1985	5.66	4.56	1.10	NA ^a	0	0	0	0
1986	5.77	5.64	0.13	Unassessed	0	0	938	938
1987	6.74	6.13	0.61	-19%	0	119	0	119
1988	6.64	5.39	1.25	65%	1,081	573	0	1,654
1990	6.44	5.18	1.26	12%	9	71	0	80
1991	5.65	5.22	0.43	Unassessed	0	0	1,262	1,262
1992	6.60	5.11	1.49	61%	4,491	2,871	0	7,362
1993	5.89	5.33	0.56	-35%	0	2,656	0	2,656
1994	5.69	5.26	0.43	Unassessed	0	0	1,392	1,392

^a No sockeye harvest during July 6-25 for that year.

Appendix D.18. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Big River, Hallo Bay, Inner and Outer Kukak Bay and Dakavak Bay Sections (statistical areas 26210-26255), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	4.05	2.43	11%	306	2,509	0	2,815
1984	5.95	3.72	2.23	15%	210	1,187	0	1,397
1985	5.66	4.56	1.09	51%	3,778	3,641	0	7,419
1986	5.77	4.47	1.30	37%	3,367	5,772	0	9,139
1987	6.74	5.30	1.44	49%	5,004	5,215	0	10,219
1988	6.64	4.50	2.15	118%	207,492	0	0	207,492
1990	6.44	4.60	1.84	90%	47,183	5,374	0	52,557
1991	5.65	4.53	1.12	96%	11,149	455	0	11,604
1992	6.60	6.08	0.52	106%	118,175	0	0	118,175
1993	5.89	5.33	0.56	138%	60,541	0	0	60,541
1994	5.69	5.02	0.67	110%	33,852	0	0	33,852

Appendix D.19. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight difference, for the Katmai and Alinchak Bay Sections (statistical areas 26260-26270), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	6.25	0.23	NA ^a	0	0	0	0
1984	5.95	6.04	-0.09	Unassessed	0	0	55	55
1985	5.66	4.83	0.83	-92%	0	16	0	16
1986	5.77	4.53	1.25	147%	2,093	0	0	2,093
1987	6.74	6.32	0.42	Unassessed	0	0	15,824	15,824
1988	6.64	5.52	1.12	124%	27,936	0	0	27,936
1990	6.44	5.37	1.07	52%	12,216	11,060	0	23,276
1991	5.65	5.61	0.03	Unassessed	0	0	1,570	1,570
1992	6.60	5.51	1.10	68%	66,979	31,072	0	98,051
1993	5.89	5.49	0.39	Unassessed	0	0	18,291	18,291
1994	5.69	5.00	0.69	70%	26,732	11,211	0	37,943

^a No sockeye harvest during July 6-25 for that year.

Appendix D.20. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.84	0.63	8%	3,592	38,764	0	42,356
1984	5.95	5.74	0.21	Unassessed	0	0	30,091	30,091
1985	5.66	5.45	0.21	Unassessed	0	0	23,544	23,544
1986	5.77	5.88	-0.11	Unassessed	0	0	65,285	65,285
1987	6.74	5.97	0.76	64%	24,790	13,756	0	38,546
1988	6.64	5.78	0.87	73%	31,464	11,731	0	43,195
1990	6.44	5.62	0.81	24%	12,417	40,320	0	52,737
1991	5.65	5.31	0.33	Unassessed	0	0	71,215	71,215
1992	6.60	5.14	1.46	64%	32,136	17,918	0	50,054
1993	5.89	5.02	0.87	57%	66,272	49,735	0	116,007
1994	5.69	5.18	0.51	19%	7,322	31,426	0	38,748

Appendix D.21. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.64	0.84	67%	31,530	15,516	0	47,046
1984	5.95	5.69	0.26	Unassessed	0	0	33,295	33,295
1985	5.66	5.41	0.25	Unassessed	0	0	25,272	25,272
1986	5.77	5.93	-0.15	Unassessed	0	0	77,140	77,140
1987	6.74	5.88	0.85	49%	12,984	13,405	0	26,389
1988	6.64	5.70	0.94	39%	11,932	18,688	0	30,620
1990	6.44	5.60	0.83	-5%	0	44,905	0	44,905
1991	5.65	5.32	0.32	Unassessed	0	0	63,093	63,093
1992	6.60	5.06	1.54	63%	19,372	11,308	0	30,680
1993	5.89	5.00	0.89	109%	119,524	0	0	119,524
1994	5.69	5.13	0.57	40%	14,200	21,082	0	35,282

Appendix D.22. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight difference, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.69	0.78	-20%	0	28,397	0	28,397
1984	5.95	5.81	0.14	Unassessed	0	0	48,998	48,998
1985	5.66	4.60	1.05	12%	1,634	11,975	0	13,609
1986	5.77	6.10	-0.32	Unassessed	0	0	50,260	50,260
1987	6.74	5.98	0.76	33%	8,892	18,294	0	27,186
1988	6.64	5.25	1.40	17%	16,847	79,761	0	96,608
1990	6.44	5.24	1.20	-23%	0	92,834	0	92,834
1991	5.65	5.23	0.42	Unassessed	0	0	131,006	131,006
1992	6.60	4.97	1.63	48%	34,152	36,701	0	70,853
1993	5.89	4.96	0.93	-6%	0	89,095	0	89,095
1994	5.69	5.07	0.62	-11%	0	100,111	0	100,111

Appendix D.23. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight difference, for the Outer Akalura, Outer Upper Station, Dog Salmon Flats and Olga Bay Sections (statistical areas 25730-25740), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.37	1.11	6%	987	16,290	0	17,277
1984	5.95	5.67	0.28	Unassessed	0	0	21,692	21,692
1985	5.66	4.53	1.12	5%	600	11,474	0	12,074
1986	5.77	5.84	-0.06	Unassessed	0	0	31,675	31,675
1987	6.74	5.69	1.05	21%	3,094	11,585	0	14,679
1988	6.64	4.90	1.75	11%	5,674	47,978	0	53,652
1990	6.44	4.91	1.53	-36%	0	20,676	0	20,676
1991	5.65	5.12	0.52	-111%	0	220,227	0	220,227
1992	6.60	4.90	1.70	18%	2,534	11,847	0	14,381
1993	5.89	4.84	1.05	-22%	0	16,958	0	16,958
1994	5.69	4.98	0.72	-37%	0	30,953	0	30,953

Appendix D.24. Estimated average weight of local (Kodiak) and UCI sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight difference, for the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Catch Total
	UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.48	5.34	1.14	16%	369	1,965	0	2,334
1984	5.95	5.75	0.19	Unassessed	0	0	2,254	2,254
1985	5.66	5.13	0.53	42%	966	1,335	0	2,301
1986	5.77	5.57	0.20	Unassessed	0	0	6,343	6,343
1987	6.74	5.81	0.93	104%	3,517	0	0	3,517
1988	6.64	5.35	1.29	77%	4,577	1,345	0	5,922
1990	6.44	5.07	1.36	39%	1,737	2,698	0	4,435
1991	5.65	5.33	0.32	Unassessed	0	0	5,125	5,125
1992	6.60	5.04	1.56	83%	9,298	1,893	0	11,191
1993	5.89	5.06	0.83	76%	7,963	2,446	0	10,409
1994	5.69	5.30	0.39	Unassessed	0	0	2,864	2,864

APPENDIX E. ESTIMATES OF NON-LOCAL AND LOCAL SOCKEYE SALMON CAUGHT, JULY 6-25, WITHIN THE KMA, BY AREA AND YEAR, USING UCI CATCH AVERAGE WEIGHT AS AN ESTIMATE FOR NON-LOCAL AVERAGE WEIGHT

Appendix E.1. Using UCI catch, July 5- August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northwest Afognak and Shuyak Island Sections (statistical areas 25130-25170), 1983-1994, except for 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Relative Point	Relative Minimum	Relative Maximum	Relative Point	Relative Minimum	Relative Maximum		
1983	7,741	7,730	8,067	2,978	2,652	2,989	0	10,719
1984	1,090	1,089	1,551	1,114	653	1,115	0	2,204
1985	0	0	0	1,116	1,116	1,116	0	1,116
1986	113	113	113	0	0	0	0	113
1987	4,749	4,686	4,855	595	489	658	0	5,344
1988	183,994	183,994	183,994	0	0	0	0	183,994
1990	0	0	1,141	5,157	4,016	5,157	0	5,157
1991	4,822	4,779	6,069	2,381	1,134	2,424	0	7,203
1992	7,083	5,682	7,513	3,110	2,680	4,511	0	10,193
1993	9,659	0	10,528	8,215	7,346	17,874	0	17,874
1994	0	0	71	4,315	4,244	4,315	0	4,315

Appendix E.2. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the South West Afognak (statistical areas 25110-25120), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	5,926	5,926	17,825	12,992	1,093	12,992	0	18,918
1984	0	0	0	0	0	0	14,047	14,047
1985	0	0	0	0	0	0	1,740	1,740
1986	0	0	0	0	0	0	20,680	20,680
1987	0	0	0	0	0	0	45,869	45,869
1988	86,649	86,649	86,649	0	0	0	0	86,649
1990	2,179	901	12,926	20,512	9,765	21,790	0	22,691
1991	31,395	30,275	32,719	2,788	1,464	3,908	0	34,183
1992	38,578	36,408	40,694	11,161	9,045	13,331	0	49,739
1993	57,368	36,550	58,267	16,599	15,700	37,417	0	73,967
1994	3,690	0	4,893	9,870	8,667	13,560	0	13,560

Appendix E.3. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	23,461	22,748	24,419	18,651	17,693	19,364	0	42,112
1984	0	0	0	0	0	0	21,496	21,496
1985	383	0	2,409	12,950	10,924	13,333	0	13,333
1986	0	0	0	0	0	0	59,151	59,151
1987	114,473	114,473	114,473	0	0	0	0	114,473
1988	75,026	75,026	75,026	0	0	0	0	75,026
1990	10,065	7,614	19,638	42,048	32,475	44,499	0	52,113
1991	0	0	0	0	0	0	58,070	58,070
1992	113,557	110,936	115,645	14,502	12,414	17,123	0	128,059
1993	121,654	102,621	127,217	26,322	20,759	45,355	0	147,976
1994	6,773	0	14,459	21,276	13,590	28,049	0	28,049

Appendix E.4. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	2,783	2,317	3,600	3,974	3,157	4,440	0	6,757
1984	989	394	1,167	729	551	1,324	0	1,718
1985	0	0	0	0	0	0	10,039	10,039
1986	0	0	0	0	0	0	22,422	22,422
1987	22,194	22,194	22,194	0	0	0	0	22,194
1988	44,751	44,751	44,751	0	0	0	0	44,751
1990	0	0	3,573	8,680	5,107	8,680	0	8,680
1991	6,701	6,307	10,336	9,451	5,816	9,845	0	16,152
1992	32,060	30,940	34,700	12,401	9,761	13,521	0	44,461
1993	23,494	8,696	27,075	14,714	11,133	29,512	0	38,208
1994	498	0	3,408	9,125	6,215	9,623	0	9,623

Appendix E.5. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Karluk Sections (statistical areas 25510-25520), 1983-1994, except 1989.

Year	Point	Non-local		Point	Local (Kodiak)		Unassessed	Total Catch
		Relative Minimum	Relative Maximum		Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18,176	18,176
1985	90	0	110	472	452	562	0	562
1986	0	0	0	0	0	0	92,150	92,150
1987	1,467	0	1,531	11,357	11,293	12,824	0	12,824
1988	5,918	5,401	6,288	1,452	1,082	1,969	0	7,370
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	1,110	1,110	1,110	0	1,110
1993	33,015	33,015	33,015	23,772	23,772	23,772	0	56,787
1994	7,081	0	7,281	39,598	39,398	46,679	0	46,679

Appendix E.6. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Sturgeon and Halibut Bay Sections (statistical areas 25625-25640), 1983-1994, 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	21,889	21,889
1985	427	427	427	393	393	393	0	820
1986	0	0	0	0	0	0	77,894	77,894
1987	1,157	578	4,944	9,330	5,543	9,909	0	10,487
1988	98,093	73,853	106,873	89,137	80,357	113,377	0	187,230
1990	0	0	2,431	7,740	5,309	7,740	0	7,740
1991	80,297	26,811	104,171	101,766	77,892	155,252	0	182,063
1992	267,689	253,359	275,294	82,002	74,397	96,332	0	349,691
1993	11	11	11	0	0	0	0	11
1994	0	0	0	14,692	14,692	14,692	0	14,692

Appendix E.7. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Ayakulik Sections (statistical areas 25610-25620), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	71,588	0	79,997	127,954	119,545	199,542	0	199,542
1985	32,658	23,265	33,853	37,359	36,164	46,752	0	70,017
1986	56,007	0	57,183	14,071	12,895	70,078	0	70,078
1987	0	0	0	0	0	0	0	0
1988	2,354	2,202	2,355	987	986	1,139	0	3,341
1990	149,194	0	154,209	363,007	357,992	512,201	0	512,201
1991	99,759	0	117,997	208,007	189,769	307,766	0	307,766
1992	150,957	148,560	150,996	13,996	13,957	16,393	0	164,953
1993	0	0	0	0	0	0	0	0
1994	0	0	0	19,554	19,554	19,554	0	19,554

Appendix E.8. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Cape Alitak Section (statistical areas 25710-25720), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,482	648	5,858	25,917	21,541	26,751	0	27,399
1984	0	0	0	0	0	0	36,120	36,120
1985	4,331	182	4,674	16,393	16,050	20,542	0	20,724
1986	0	0	0	0	0	0	51,484	51,484
1987	32,372	31,967	34,648	6,265	3,989	6,670	0	38,637
1988	47,716	47,706	47,775	55,601	55,542	55,611	0	103,317
1990	0	0	19,664	132,489	112,825	132,489	0	132,489
1991	0	0	42,015	290,783	248,768	290,783	0	290,783
1992	58,696	51,331	60,488	40,383	38,591	47,748	0	99,079
1993	20,595	0	28,194	104,960	97,361	125,555	0	125,555
1994	0	0	11,708	133,924	122,216	133,924	0	133,924

Appendix E.9. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,178	990	1,185	6,056	6,049	6,244	0	7,234
1984	0	0	0	0	0	0	1,306	1,306
1985	2,130	1,440	2,150	2,773	2,753	3,463	0	4,903
1986	0	0	0	0	0	0	38,737	38,737
1987	9,530	9,530	9,586	713	657	713	0	10,243
1988	9,194	8,378	10,284	5,194	4,104	6,010	0	14,388
1990	3,018	3,018	3,018	2,921	2,921	2,921	0	5,939
1991	0	0	3,548	10,312	6,764	10,312	0	10,312
1992	10,933	10,933	10,933	0	0	0	0	10,933
1993	0	0	0	0	0	0	7,234	7,234
1994	2,689	0	6,737	21,595	17,547	24,284	0	24,284

Appendix E.10. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Seven River and Two-Headed Sections (statistical areas 25854-25890), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	2,265	2,265	2,265	0	2,265
1984	0	0	0	0	0	0	2,441	2,441
1985	0	0	0	3,048	3,048	3,048	0	3,048
1986	0	0	0	220	220	220	0	220
1987	727	727	727	1,374	1,374	1,374	0	2,101
1988	0	0	0	1,309	1,309	1,309	0	1,309
1990	598	435	837	689	450	852	0	1,287
1991	6,402	6,402	6,402	2,827	2,827	2,827	0	9,229
1992	47,687	47,218	48,419	4,867	4,135	5,336	0	52,554
1993	0	0	0	58,868	58,868	58,868	0	58,868
1994	4,830	0	4,979	22,769	22,620	27,599	0	27,599

Appendix E.11. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Sitkalidak Section (statistical areas 25810-25853), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,673	1,673	1,673	1,935	1,935	1,935	0	3,608
1984	0	0	0	0	0	0	1,851	1,851
1985	1,910	0	3,013	5,666	4,563	7,576	0	7,576
1986	0	0	0	11,643	11,643	11,643	0	11,643
1987	5,759	0	5,759	0	0	5,759	0	5,759
1988	47,968	47,703	47,998	1,187	1,157	1,452	0	49,155
1990	54,363	54,238	54,498	489	354	614	0	54,852
1991	0	0	0	0	0	0	174,666	174,666
1992	345,337	342,227	349,779	84,305	79,863	87,415	0	429,642
1993	59,231	36,911	74,970	53,975	38,236	76,295	0	113,206
1994	14,328	7,430	15,722	21,110	19,716	28,008	0	35,438

Appendix E. 12. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Ugak Sections (statistical areas 25940-25942), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	4,137	4,137	4,137	0	4,137
1984	0	0	0	0	0	0	10,395	10,395
1985	0	0	0	0	0	0	1,372	1,372
1986	0	0	0	0	0	0	18,321	18,321
1987	0	0	0	3,327	3,327	3,327	0	3,327
1988	0	0	0	0	0	0	12,147	12,147
1990	4,960	443	5,965	6,915	5,910	11,432	0	11,875
1991	9,267	9,267	9,267	3,755	3,755	3,755	0	13,022
1992	43,875	37,504	55,622	29,169	17,422	35,540	0	73,044
1993	28,170	13,376	29,107	34,859	33,922	49,653	0	63,029
1994	3,538	3,227	3,817	9,599	9,320	9,910	0	13,137

Appendix E.13. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northeast Kodiak District (statistical areas 25910-25925), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	633	633	633	255	255	255	0	888
1984	0	0	0	662	662	662	0	662
1985	64	64	64	100	100	100	0	164
1986	0	0	0	125	125	125	0	125
1987	0	0	0	60	60	60	0	60
1988	235	235	235	28	28	28	0	263
1990	0	0	0	5	5	5	0	5
1991	0	0	0	0	0	0	13,804	13,804
1992	22,012	22,012	22,012	27,823	27,823	27,823	0	49,835
1993	3,292	3,292	3,292	3,343	3,343	3,343	0	6,635
1994	1,417	0	1,557	1,884	1,744	3,301	0	3,301

Appendix E.14. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	20	0	887	1,932	1,065	1,952	0	1,952
1984	0	0	0	2,585	2,585	2,585	0	2,585
1985	0	0	1,374	6,141	4,767	6,141	0	6,141
1986	11,868	11,868	11,868	0	0	0	0	11,868
1987	8,642	8,612	8,650	176	168	206	0	8,818
1988	14,840	13,591	14,996	2,080	1,924	3,329	0	16,920
1990	4,309	1,899	4,846	5,701	5,164	8,111	0	10,010
1991	0	0	1,066	8,115	7,049	8,115	0	8,115
1992	6,196	5,584	6,211	609	594	1,221	0	6,805
1993	5,169	1,881	5,179	976	966	4,264	0	6,145
1994	348	0	1,588	11,085	9,845	11,433	0	11,433

Appendix E.15. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Southeast Afognak Section (statistical areas 25233-25235), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,018	825	1,020	935	933	1,128	0	1,953
1984	426	208	430	651	647	869	0	1,077
1985	1,117	0	1,496	1,028	649	2,145	0	2,145
1986	2,716	2,716	2,716	0	0	0	0	2,716
1987	3,601	3,601	3,601	0	0	0	0	3,601
1988	293	279	300	118	111	132	0	411
1990	757	0	803	4,072	4,026	4,829	0	4,829
1991	1,075	0	1,077	6,362	6,360	7,437	0	7,437
1992	10,445	9,646	10,561	1,195	1,079	1,994	0	11,640
1993	5,438	4,623	5,580	2,489	2,347	3,304	0	7,927
1994	877	375	879	163	161	665	0	1,040

Appendix E. 16. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Duck, Izhut and Kitoi Bay Sections (statistical areas 25230-25232), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	6,201	6,201	6,201	0	6,201
1984	372	148	416	1,215	1,171	1,439	0	1,587
1985	1,545	1,437	2,672	4,212	3,085	4,320	0	5,757
1986	237	237	237	0	0	0	0	237
1987	4,854	4,854	4,854	2,238	2,238	2,238	0	7,092
1988	2,968	2,968	2,968	320	320	320	0	3,288
1990	316	316	316	662	662	662	0	978
1991	1,310	1,257	1,374	2,194	2,130	2,247	0	3,504
1992	5,923	5,871	6,082	11,866	11,707	11,918	0	17,789
1993	4,228	248	4,367	14,477	14,338	18,457	0	18,705
1994	2,051	1,560	3,251	2,542	1,342	3,033	0	4,593

Appendix E.17. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northeast Afognak and Perenos Sections (statistical areas 25181-25220), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	43	27	43	40	40	56	0	83
1984	379	0	379	299	299	678	0	678
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	938	938
1987	0	0	80	119	39	119	0	119
1988	1,081	1,004	1,219	573	435	650	0	1,654
1990	9	0	36	71	44	80	0	80
1991	0	0	0	0	0	0	1,262	1,262
1992	4,491	4,491	4,491	2,871	2,871	2,871	0	7,362
1993	0	0	0	2,656	2,656	2,656	0	2,656
1994	0	0	0	0	0	0	1,392	1,392

Appendix E.18. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Big River, Hallo Bay, Inner and Outer Kukak Bay and Dakavak Bay Sections (statistical areas 26210-26255), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	306	306	306	2,509	2,509	2,509	0	2,815
1984	210	0	274	1,187	1,123	1,397	0	1,397
1985	3,778	3,540	4,704	3,641	2,715	3,879	0	7,419
1986	3,367	3,121	4,905	5,772	4,234	6,018	0	9,139
1987	5,004	4,776	6,636	5,215	3,583	5,443	0	10,219
1988	207,492	207,492	207,492	0	0	0	0	207,492
1990	47,183	45,440	48,837	5,374	3,720	7,117	0	52,557
1991	11,149	10,899	11,365	455	239	705	0	11,604
1992	118,175	118,175	118,175	0	0	0	0	118,175
1993	60,541	60,541	60,541	0	0	0	0	60,541
1994	33,852	33,852	33,852	0	0	0	0	33,852

Appendix E.19. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Katmai and Alinchak Bay Sections (statistical areas 26260-26270), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	55	55
1985	0	0	0	16	16	16	0	16
1986	2,093	2,093	2,093	0	0	0	0	2,093
1987	0	0	0	0	0	0	15,824	15,824
1988	27,936	27,936	27,936	0	0	0	0	27,936
1990	12,216	12,216	12,216	11,060	11,060	11,060	0	23,276
1991	0	0	0	0	0	0	1,570	1,570
1992	66,979	66,979	66,979	31,072	31,072	31,072	0	98,051
1993	0	0	0	0	0	0	18,291	18,291
1994	26,732	26,732	26,732	11,211	11,211	11,211	0	37,943

Appendix E. 20. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	3,592	0	20,015	38,764	22,341	42,356	0	42,356
1984	0	0	0	0	0	0	30,091	30,091
1985	0	0	0	0	0	0	23,544	23,544
1986	0	0	0	0	0	0	65,285	65,285
1987	24,790	22,970	27,235	13,756	11,311	15,576	0	38,546
1988	31,464	29,400	33,447	11,731	9,748	13,795	0	43,195
1990	12,417	8,920	25,486	40,320	27,251	43,817	0	52,737
1991	0	0	0	0	0	0	71,215	71,215
1992	32,136	30,757	33,029	17,918	17,025	19,297	0	50,054
1993	66,272	17,797	73,279	49,735	42,728	98,210	0	116,007
1994	7,322	0	14,492	31,426	24,256	38,748	0	38,748

Appendix E.21. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	31,530	29,814	36,312	15,516	10,734	17,232	0	47,046
1984	0	0	0	0	0	0	33,295	33,295
1985	0	0	0	0	0	0	25,272	25,272
1986	0	0	0	0	0	0	77,140	77,140
1987	12,984	9,885	15,864	13,405	10,525	16,504	0	26,389
1988	11,932	7,379	16,686	18,688	13,934	23,241	0	30,620
1990	0	0	10,869	44,905	34,036	44,905	0	44,905
1991	0	0	0	0	0	0	63,093	63,093
1992	19,372	17,774	20,273	11,308	10,407	12,906	0	30,680
1993	119,524	119,524	119,524	0	0	0	0	119,524
1994	14,200	3,124	19,872	21,082	15,410	32,158	0	35,282

Appendix E.22. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	1,899	28,397	26,498	28,397	0	28,397
1984	0	0	0	0	0	0	48,998	48,998
1985	1,634	560	1,757	11,975	11,852	13,049	0	13,609
1986	0	0	0	0	0	0	50,260	50,260
1987	8,892	8,265	15,242	18,294	11,944	18,921	0	27,186
1988	16,847	7,365	37,077	79,761	59,531	89,243	0	96,608
1990	0	0	10,324	92,834	82,510	92,834	0	92,834
1991	0	0	0	0	0	0	131,006	131,006
1992	34,152	23,683	37,733	36,701	33,120	47,170	0	70,853
1993	0	0	3,664	89,095	85,431	89,095	0	89,095
1994	0	0	21,394	100,111	78,717	100,111	0	100,111

Appendix E.23. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Outer Akalura, Outer Upper Station, Dog Salmon Flats and Olga Bay Sections (statistical areas 25730-25740), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	987	0	3,234	16,290	14,043	17,277	0	17,277
1984	0	0	0	0	0	0	21,692	21,692
1985	600	0	1,200	11,474	10,874	12,074	0	12,074
1986	0	0	0	0	0	0	31,675	31,675
1987	3,094	0	5,124	11,585	9,555	14,679	0	14,679
1988	5,674	4,756	7,004	47,978	46,648	48,896	0	53,652
1990	0	0	0	20,676	20,676	20,676	0	20,676
1991	0	0	0	220,227	220,227	220,227	0	220,227
1992	2,534	387	3,375	11,847	11,006	13,994	0	14,381
1993	0	0	0	16,958	16,958	16,958	0	16,958
1994	0	0	0	30,953	30,953	30,953	0	30,953

Appendix E.24. Using UCI catch, July 5 - August 8, for the non-local average weight estimate, point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	369	353	447	1,965	1,887	1,981	0	2,334
1984	0	0	0	0	0	0	2,254	2,254
1985	966	140	1,276	1,335	1,025	2,161	0	2,301
1986	0	0	0	0	0	0	6,343	6,343
1987	3,517	3,517	3,517	0	0	0	0	3,517
1988	4,577	2,914	4,833	1,345	1,089	3,008	0	5,922
1990	1,737	920	2,455	2,698	1,980	3,515	0	4,435
1991	0	0	0	0	0	0	5,125	5,125
1992	9,298	8,662	9,359	1,893	1,832	2,529	0	11,191
1993	7,963	6,179	8,065	2,446	2,344	4,230	0	10,409
1994	0	0	0	0	0	0	2,864	2,864

APPENDIX F. ESTIMATED AVERAGE WEIGHT OF LOCAL (KODIAK) AND COMBINED UCI AND CHINGNIK SOCKEYE SALMON AND CORRESPONDING HARVEST STOCK COMPOSITION ESTIMATES, JULY 6-25, BASED ON AVERAGE WEIGHT DIFFERENCES, BY AREA, GEAR AND YEAR.

Appendix F.1. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the North West Afognak and Shuyak Island Sections (statistical areas 25130-25170), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.58	1.98	69%	7,442	3,277	0	10,719
1984	6.10	4.38	1.72	45%	992	1,212	0	2,204
1985	5.65	4.31	1.34	-24%	0	1,116	0	1,116
1986	5.95	4.64	1.31	123%	113	0	0	113
1987	6.77	5.35	1.42	87%	4,648	696	0	5,344
1988	6.71	5.15	1.57	139%	183,994	0	0	183,994
1990	6.59	5.16	1.43	-43%	0	5,157	0	5,157
1991	5.79	4.78	1.00	58%	4,150	3,053	0	7,203
1992	6.59	4.41	2.18	70%	7,120	3,073	0	10,193
1993	5.95	4.69	1.25	51%	9,204	8,670	0	17,874
1994	5.82	4.51	1.31	-12%	0	4,315	0	4,315

Appendix F.2. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Southwest Afognak Section (statistical areas 25110-25120), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.93	0.62	27%	5,198	13,720	0	18,918
1984	6.10	5.65	0.45	Unassessed	0	0	14,047	14,047
1985	5.65	5.19	0.46	Unassessed	0	0	1,740	1,740
1986	5.95	5.57	0.37	Unassessed	0	0	20,680	20,680
1987	6.77	6.57	0.20	Unassessed	0	0	45,869	45,869
1988	6.71	5.87	0.85	157%	86,649	0	0	86,649
1990	6.59	5.41	1.18	8%	1,900	20,791	0	22,691
1991	5.79	5.11	0.68	73%	24,884	9,299	0	34,183
1992	6.59	4.78	1.81	78%	38,817	10,922	0	49,739
1993	5.95	4.64	1.30	74%	54,777	19,190	0	73,967
1994	5.82	4.46	1.36	25%	3,350	10,210	0	13,560

Appendix F.3. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates based on average weight differences, for the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.52	1.03	52%	21,729	20,383	0	42,112
1984	6.10	5.65	0.45	Unassessed	0	0	21,496	21,496
1985	5.65	5.01	0.64	3%	386	12,947	0	13,333
1986	5.95	5.72	0.23	Unassessed	0	0	59,151	59,151
1987	6.77	5.85	0.92	149%	114,473	0	0	114,473
1988	6.71	5.52	1.20	107%	75,026	0	0	75,026
1990	6.59	5.32	1.27	17%	8,866	43,247	0	52,113
1991	5.79	5.20	0.58	Unassessed	0	0	58,070	58,070
1992	6.59	4.98	1.61	89%	114,346	13,713	0	128,059
1993	5.95	4.82	1.13	78%	115,286	32,690	0	147,976
1994	5.82	4.78	1.04	21%	5,957	22,092	0	28,049

Appendix F.4. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates based on average weight differences, for the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion (%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.13	1.42	39%	2,634	4,123	0	6,757
1984	6.10	5.09	1.01	49%	837	881	0	1,718
1985	5.65	5.20	0.45	Unassessed	0	0	10,039	10,039
1986	5.95	5.81	0.14	Unassessed	0	0	22,422	22,422
1987	6.77	5.50	1.27	117%	22,194	0	0	22,194
1988	6.71	5.43	1.29	101%	44,751	0	0	44,751
1990	6.59	5.34	1.25	-7%	0	8,680	0	8,680
1991	5.79	5.07	0.72	33%	5,395	10,757	0	16,152
1992	6.59	4.89	1.69	73%	32,271	12,190	0	44,461
1993	5.95	4.83	1.12	58%	22,259	15,949	0	38,208
1994	5.82	4.60	1.22	5%	447	9,176	0	9,623

Appendix F.5. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Inner and Outer Karluk Sections Sections (statistical areas 25510-25520), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.51	2.04	NA ^a	0	0	0	0
1984	6.10	5.55	0.55	Unassessed	0	0	18,176	18,176
1985	5.65	4.63	1.02	16%	91	471	0	562
1986	5.95	5.92	0.03	Unassessed	0	0	92,150	92,150
1987	6.77	5.15	1.62	11%	1,439	11,385	0	12,824
1988	6.71	5.38	1.33	76%	5,597	1,773	0	7,370
1990	6.59	5.42	1.17	NA ^a	0	0	0	0
1991	5.79	NA ^b	NA ^b	NA ^b	0	0	0	0
1992	6.59	4.66	1.93	-10%	0	1,110	0	1,110
1993	5.95	4.52	1.43	56%	31,653	25,134	0	56,787
1994	5.82	4.36	1.45	14%	6,469	40,210	0	46,679

^a No sockeye harvested during July 6-25 for that year.

^b No sockeye harvested for that year.

Appendix F.6. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Sturgeon and Halibut Bay Sections (statistical areas 25625-25640), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	NA ^a	NA ^a	NA ^a	0	0	0	0
1984	6.10	5.66	0.44	Unassessed	0	0	21,889	21,889
1985	5.65	4.53	1.12	52%	429	391	0	820
1986	5.95	6.15	-0.21	Unassessed	0	0	77,894	77,894
1987	6.77	5.87	0.89	11%	1,118	9,369	0	10,487
1988	6.71	4.93	1.78	50%	94,124	93,106	0	187,230
1990	6.59	5.34	1.25	-5%	0	7,740	0	7,740
1991	5.79	5.03	0.75	36%	65,366	116,697	0	182,063
1992	6.59	4.93	1.66	77%	269,492	80,199	0	349,691
1993	5.95	4.89	1.05	381%	11	0	0	11
1994	5.82	5.01	0.80	-10%	0	14,692	0	14,692

^a No sockeye harvested for that year.

Appendix F.7. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Inner and Outer Ayakulik Sections (statistical areas 25610-25620), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.27	1.29	NA ^a	0	0	0	0
1984	6.10	4.44	1.66	33%	64,880	134,662	0	199,542
1985	5.65	4.53	1.12	47%	32,806	37,211	0	70,017
1986	5.95	4.86	1.09	67%	46,978	23,100	0	70,078
1987	6.77	5.04	1.72	NA ^a	0	0	0	0
1988	6.71	4.76	1.96	68%	2,267	1,074	0	3,341
1990	6.59	4.71	1.88	27%	137,203	374,998	0	512,201
1991	5.79	4.87	0.92	27%	84,495	223,271	0	307,766
1992	6.59	4.69	1.90	92%	151,849	13,104	0	164,953
1993	5.95	4.88	1.07	NA ^a	0	0	0	0
1994	5.82	4.82	1.00	-10%	0	19,554	0	19,554

^a No sockeye harvested during July 6-25 for that year.

Appendix F.8. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Cape Alitak Section (statistical areas 25710-25720), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.50	1.05	5%	1,375	26,024	0	27,399
1984	6.10	5.65	0.45	Unassessed	0	0	36,120	36,120
1985	5.65	4.23	1.43	21%	4,347	16,377	0	20,724
1986	5.95	6.06	-0.11	Unassessed	0	0	51,484	51,484
1987	6.77	5.86	0.91	81%	31,298	7,339	0	38,637
1988	6.71	4.68	2.03	45%	46,023	57,294	0	103,317
1990	6.59	5.02	1.57	-10%	0	132,489	0	132,489
1991	5.79	5.05	0.73	-20%	0	290,783	0	290,783
1992	6.59	4.80	1.79	60%	59,064	40,015	0	99,079
1993	5.95	4.88	1.07	15%	19,460	106,095	0	125,555
1994	5.82	4.69	1.12	-1%	0	133,924	0	133,924

Appendix F.9. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.44	1.11	15%	1,097	6,137	0	7,234
1984	6.10	5.63	0.48	Unassessed	0	0	1,306	1,306
1985	5.65	4.27	1.38	44%	2,138	2,765	0	4,903
1986	5.95	6.09	-0.14	Unassessed	0	0	38,737	38,737
1987	6.77	5.91	0.86	90%	9,197	1,046	0	10,243
1988	6.71	4.77	1.94	62%	8,853	5,535	0	14,388
1990	6.59	4.56	2.03	47%	2,794	3,145	0	5,939
1991	5.79	5.13	0.66	-11%	0	10,312	0	10,312
1992	6.59	4.62	1.97	107%	10,933	0	0	10,933
1993	5.95	5.44	0.50	Unassessed	0	0	7,234	7,234
1994	5.82	4.66	1.15	10%	2,397	21,887	0	24,284

Appendix F.10. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Seven River and Two-Headed Sections (statistical areas 25854-25890), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.17	1.38	-10%	0	2,265	0	2,265
1984	6.10	NA ^a	NA ^a	NA ^a	0	0	2,441	2,441
1985	5.65	4.48	1.17	-36%	0	3,048	0	3,048
1986	5.95	4.75	1.20	-86%	0	220	0	220
1987	6.77	5.73	1.04	34%	706	1,395	0	2,101
1988	6.71	5.22	1.50	-2%	0	1,309	0	1,309
1990	6.59	5.27	1.32	41%	530	757	0	1,287
1991	5.79	4.84	0.95	59%	5,456	3,773	0	9,229
1992	6.59	5.30	1.29	92%	48,101	4,453	0	52,554
1993	5.95	5.27	0.67	-16%	0	58,868	0	58,868
1994	5.82	4.85	0.96	15%	4,201	23,398	0	27,599

^a No sockeye harvested during June or August for that year.

Appendix F.11. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Sitkalidak Section (statistical areas 25810-25853), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.77	1.78	44%	1,602	2,006	0	3,608
1984	6.10	6.02	0.08	Unassessed	0	0	1,851	1,851
1985	5.65	4.70	0.95	25%	1,921	5,655	0	7,576
1986	5.95	6.31	-0.37	73%	8,464	3,179	0	11,643
1987	6.77	5.43	1.34	115%	5,759	0	0	5,759
1988	6.71	5.26	1.46	93%	45,597	3,558	0	49,155
1990	6.59	5.19	1.40	88%	48,499	6,353	0	54,852
1991	5.79	5.28	0.51	Unassessed	0	0	174,666	174,666
1992	6.59	5.17	1.42	81%	348,058	81,584	0	429,642
1993	5.95	4.65	1.30	50%	56,539	56,667	0	113,206
1994	5.82	4.82	1.00	35%	12,526	22,912	0	35,438

Appendix F.12. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Inner and Outer Ugak Bay Sections (statistical areas 25940-25942), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.67	0.88	-41%	0	4,137	0	4,137
1984	6.10	5.99	0.11	Unassessed	0	0	10,395	10,395
1985	5.65	5.30	0.36	Unassessed	0	0	1,372	1,372
1986	5.95	5.44	0.51	Unassessed	0	0	18,321	18,321
1987	6.77	8.00	-1.23	-243%	0	3,327	0	3,327
1988	6.71	6.15	0.57	Unassessed	0	0	12,147	12,147
1990	6.59	4.89	1.70	38%	4,521	7,354	0	11,875
1991	5.79	4.65	1.14	62%	8,125	4,897	0	13,022
1992	6.59	5.66	0.93	61%	44,401	28,643	0	73,044
1993	5.95	5.11	0.84	42%	26,196	36,833	0	63,029
1994	5.82	4.83	0.99	24%	3,089	10,048	0	13,137

Appendix F.13. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Northeast Kodiak District (statistical areas 25910-25925), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.15	1.40	67%	598	290	0	888
1984	6.10	4.66	1.44	-69%	0	662	0	662
1985	5.65	4.84	0.81	39%	64	100	0	164
1986	5.95	5.10	0.85	-16%	0	125	0	125
1987	6.77	6.07	0.70	-36%	0	60	0	60
1988	6.71	4.92	1.80	86%	226	37	0	263
1990	6.59	5.20	1.39	-28%	0	5	0	5
1991	5.79	5.34	0.44	Unassessed	0	0	13,804	13,804
1992	6.59	6.01	0.58	45%	22,439	27,396	0	49,835
1993	5.95	4.96	0.99	47%	3,095	3,540	0	6,635
1994	5.82	4.59	1.23	39%	1,272	2,029	0	3,301

Appendix F.14. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Central Section, east, and North Cape Sections (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.57	0.99	1%	18	1,934	0	1,952
1984	6.10	5.05	1.06	-2%	0	2,585	0	2,585
1985	5.65	5.07	0.59	-28%	0	6,141	0	6,141
1986	5.95	5.27	0.68	96%	11,449	419	0	11,868
1987	6.77	5.55	1.22	96%	8,427	391	0	8,818
1988	6.71	4.89	1.83	84%	14,254	2,666	0	16,920
1990	6.70	4.71	1.88	40%	3,964	6,046	0	10,010
1991	5.84	5.07	0.71	-11%	0	8,115	0	8,115
1992	6.60	4.90	1.69	92%	6,237	568	0	6,805
1993	5.94	4.90	1.05	79%	4,879	1,266	0	6,145
1994	5.82	4.87	0.95	3%	302	11,131	0	11,433

Appendix F.15. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Southeast Afognak Sections (statistical areas 25233-25235), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.06	2.49	51%	986	967	0	1,953
1984	6.10	4.40	1.71	36%	387	690	0	1,077
1985	5.65	4.36	1.29	52%	1,121	1,024	0	2,145
1986	5.95	4.82	1.12	106%	2,716	0	0	2,716
1987	6.77	4.78	1.99	103%	3,601	0	0	3,601
1988	6.71	4.95	1.76	68%	281	130	0	411
1990	6.59	3.67	2.92	15%	718	4,111	0	4,829
1991	5.79	4.35	1.44	13%	970	6,467	0	7,437
1992	6.59	4.04	2.55	90%	10,491	1,149	0	11,640
1993	5.95	4.56	1.38	66%	5,207	2,720	0	7,927
1994	5.82	3.71	2.10	79%	824	216	0	1,040

Appendix F.16. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Duck, Izhut and Kitoi Bay Sections (statistical areas 25230-25232), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.94	1.61	-12%	0	6,201	0	6,201
1984	6.10	4.57	1.53	21%	334	1,253	0	1,587
1985	5.65	4.67	0.98	27%	1,553	4,204	0	5,757
1986	5.95	4.91	1.04	137%	237	0	0	237
1987	6.77	5.81	0.96	66%	4,701	2,391	0	7,092
1988	6.71	4.97	1.75	87%	2,846	442	0	3,288
1990	6.59	4.97	1.62	29%	286	692	0	978
1991	5.79	4.59	1.20	33%	1,156	2,348	0	3,504
1992	6.59	5.06	1.53	34%	5,966	11,823	0	17,789
1993	5.95	5.07	0.88	21%	3,945	14,760	0	18,705
1994	5.82	5.04	0.78	37%	1,720	2,873	0	4,593

Appendix F.17. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Northeast Afognak and Perenosa Sections (statistical areas 25181-25220), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.39	2.16	50%	42	41	0	83
1984	6.10	4.58	1.52	50%	340	338	0	678
1985	5.65	4.56	1.09	NA ^a	0	0	0	0
1986	5.95	5.64	0.31	Unassessed	0	0	938	938
1987	6.77	6.13	0.64	-18%	0	119	0	119
1988	6.71	5.39	1.32	62%	1,022	632	0	1,654
1990	6.59	5.18	1.41	10%	8	72	0	80
1991	5.79	5.22	0.57	Unassessed	0	0	1,262	1,262
1992	6.59	5.11	1.48	61%	4,526	2,836	0	7,362
1993	5.95	5.33	0.61	-32%	0	2,656	0	2,656
1994	5.82	5.26	0.56	Unassessed	0	0	1,392	1,392

^a No sockeye harvested during July 6-25 for that year.

Appendix F.18. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Big River, Inner and Outer Kukak Bay and Dakavak Bay Sections (statistical areas 26210-26255), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	4.05	2.51	11%	297	2,518	0	2,815
1984	6.10	3.72	2.38	14%	196	1,201	0	1,397
1985	5.65	4.56	1.09	51%	3,796	3,623	0	7,419
1986	5.95	4.47	1.48	32%	2,965	6,174	0	9,139
1987	6.77	5.30	1.47	48%	4,901	5,318	0	10,219
1988	6.71	4.50	2.22	115%	207,492	0	0	207,492
1990	6.59	4.60	1.99	83%	43,610	8,947	0	52,557
1991	5.79	4.53	1.26	85%	9,910	1,694	0	11,604
1992	6.59	6.08	0.51	109%	118,175	0	0	118,175
1993	5.95	5.33	0.62	124%	60,541	0	0	60,541
1994	5.82	5.02	0.80	93%	31,421	2,431	0	33,852

Appendix F.19. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Katmai and Alinchak Bay Sections (statistical areas 26260-26270), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	6.25	0.30	NA ^a	0	0	0	0
1984	6.10	6.04	0.07	Unassessed	0	0	55	55
1985	5.65	4.83	0.83	-93%	0	16	0	16
1986	5.95	4.53	1.42	129%	2,093	0	0	2,093
1987	6.77	6.32	0.45	Unassessed	0	0	15,824	15,824
1988	6.71	5.52	1.19	117%	27,936	0	0	27,936
1990	6.59	5.37	1.22	46%	10,706	12,570	0	23,276
1991	5.79	5.61	0.17	Unassessed	0	0	1,570	1,570
1992	6.59	5.51	1.08	69%	67,671	30,380	0	98,051
1993	5.95	5.49	0.45	Unassessed	0	0	18,291	18,291
1994	5.82	5.00	0.82	60%	22,627	15,316	0	37,943

^a No sockeye harvested during July 6-25 for that year.

Appendix F.20. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding set gillnet harvest stock composition estimates, July 6-25, based on average weight differences, for the Central, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.84	0.71	8%	3,205	39,151	0	42,356
1984	6.10	5.74	0.36	Unassessed	0	0	30,091	30,091
1985	5.65	5.45	0.20	Unassessed	0	0	23,544	23,544
1986	5.95	5.88	0.07	Unassessed	0	0	65,285	65,285
1987	6.77	5.97	0.79	62%	23,848	14,698	0	38,546
1988	6.71	5.78	0.94	67%	29,049	14,146	0	43,195
1990	6.59	5.62	0.96	20%	10,475	42,262	0	52,737
1991	5.79	5.31	0.47	Unassessed	0	0	71,215	71,215
1992	6.59	5.14	1.45	65%	32,384	17,670	0	50,054
1993	5.95	5.02	0.92	53%	62,049	53,958	0	116,007
1994	5.82	5.18	0.64	15%	5,877	32,871	0	38,748

Appendix F.21. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Central, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.64	0.91	61%	28,899	18,147	0	47,046
1984	6.10	5.69	0.42	Unassessed	0	0	33,295	33,295
1985	5.65	5.41	0.24	Unassessed	0	0	25,272	25,272
1986	5.95	5.93	0.02	Unassessed	0	0	77,140	77,140
1987	6.77	5.88	0.88	48%	12,540	13,849	0	26,389
1988	6.71	5.70	1.01	36%	11,083	19,537	0	30,620
1990	6.59	5.60	0.98	-4%	0	44,905	0	44,905
1991	5.79	5.32	0.46	Unassessed	0	0	63,093	63,093
1992	6.59	5.06	1.53	64%	19,514	11,166	0	30,680
1993	5.95	5.00	0.95	102%	119,524	0	0	119,524
1994	5.82	5.13	0.69	33%	11,623	23,659	0	35,282

Appendix F.22. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.69	0.86	-18%	0	28,397	0	28,397
1984	6.10	5.81	0.29	Unassessed	0	0	48,998	48,998
1985	5.65	4.60	1.05	12%	1,642	11,967	0	13,609
1986	5.95	6.10	-0.15	Unassessed	0	0	50,260	50,260
1987	6.77	5.98	0.79	31%	8,553	18,633	0	27,186
1988	6.71	5.25	1.47	17%	16,019	80,589	0	96,608
1990	6.59	5.24	1.35	-21%	0	92,834	0	92,834
1991	5.79	5.23	0.56	Unassessed	0	0	131,006	131,006
1992	6.59	4.97	1.62	49%	34,388	36,465	0	70,853
1993	5.95	4.96	0.99	-6%	0	89,095	0	89,095
1994	5.82	5.07	0.74	-9%	0	100,111	0	100,111

Appendix F.23. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Outer Akalura, Outer Upper Station, Dog Salmon Flats and Olga Bay Sections (statistical areas 25730-25740), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.37	1.18	5%	923	16,354	0	17,277
1984	6.10	5.67	0.43	Unassessed	0	0	21,692	21,692
1985	5.65	4.53	1.12	5%	603	11,471	0	12,074
1986	5.95	5.84	0.11	Unassessed	0	0	31,675	31,675
1987	6.77	5.69	1.08	20%	3,008	11,671	0	14,679
1988	6.71	4.90	1.82	10%	5,449	48,203	0	53,652
1990	6.59	4.91	1.68	-33%	0	20,676	0	20,676
1991	5.79	5.12	0.66	-88%	0	220,227	0	220,227
1992	6.59	4.90	1.69	18%	2,551	11,830	0	14,381
1993	5.95	4.84	1.11	-21%	0	16,958	0	16,958
1994	5.82	4.98	0.84	-32%	0	30,953	0	30,953

Appendix F.24. Estimated average weight of local (Kodiak) and combined UCI and Chignik sockeye salmon and corresponding seine harvest stock composition estimates, July 6-25, based on average weight differences, for the Central Section, and North Cape nn(25936-25939), 1983-1994, except 1989.

Year	Estimated Average Weight (pounds)			Estimated Non-local Catch Proportion(%)	Estimated Stock Composition (Number of Fish)			Total Catch
	Chignik and UCI	Local	Difference		Non-local	Local	Unassessed	
1983	6.55	5.34	1.21	15%	346	1,988	0	2,334
1984	6.10	5.75	0.35	Unassessed	0	0	2,254	2,254
1985	5.65	5.13	0.52	42%	975	1,326	0	2,301
1986	5.95	5.57	0.38	Unassessed	0	0	6,343	6,343
1987	6.77	5.81	0.96	100%	3,517	0	0	3,517
1988	6.71	5.35	1.36	73%	4,335	1,587	0	5,922
1990	6.59	5.07	1.52	35%	1,564	2,871	0	4,435
1991	5.79	5.33	0.46	Unassessed	0	0	5,125	5,125
1992	6.59	5.04	1.55	84%	9,366	1,825	0	11,191
1993	5.95	5.06	0.89	71%	7,434	2,975	0	10,409
1994	5.82	5.30	0.51	Unassessed	0	0	2,864	2,864

APPENDIX G. USING A WEIGHTED AVERAGE OF THE CHIGNIK AND UCI HARVEST FOR THE NON-LOCAL AVERAGE WEIGHT ESTIMATE; POINT, RELATIVE MINIMUM AND MAXIMUM ESTIMATES OF NON-LOCAL AND LOCAL SOCKEYE SALMON, AND UNASSESSED AND TOTAL SOCKEYE HARVEST IN NUMBER OF FISH IN THE FISHERY, JULY 6-25, WITHIN THE KMA.

Appendix G.1. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northwest Afognak and Shuyak Island Sections (statistical areas 25130-25170), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	7,442	7,430	7,788	3,277	2,931	3,289	0	10,719
1984	992	991	1,466	1,212	738	1,213	0	2,204
1985	0	0	0	1,116	1,116	1,116	0	1,116
1986	113	113	113	0	0	0	0	113
1987	4,648	4,575	4,769	696	575	769	0	5,344
1988	183,994	183,994	183,994	0	0	0	0	183,994
1990	0	0	1,075	5,157	4,082	5,157	0	5,157
1991	4,150	4,102	5,634	3,053	1,569	3,101	0	7,203
1992	7,120	5,724	7,547	3,073	2,646	4,469	0	10,193
1993	9,204	0	10,083	8,670	7,791	17,874	0	17,874
1994	0	0	65	4,315	4,250	4,315	0	4,315

Appendix G.2. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Southwest Afognak Section (statistical areas 25110-25120), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	5,198	5,198	5,198	13,720	13,720	13,720	0	18,918
1984	0	0	0	0	0	0	14,047	14,047
1985	0	0	0	0	0	0	1,740	1,740
1986	0	0	0	0	0	0	20,680	20,680
1987	0	0	0	0	0	0	45,869	45,869
1988	86,649	86,649	86,649	0	0	0	0	86,649
1990	1,900	780	12,083	20,791	10,608	21,911	0	22,691
1991	24,884	22,149	28,765	9,299	5,418	12,034	0	34,183
1992	38,817	36,677	40,897	10,922	8,842	13,062	0	49,739
1993	54,777	33,029	55,771	19,190	18,196	40,938	0	73,967
1994	3,350	0	4,492	10,210	9,068	13,560	0	13,560

Appendix G.3. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	21,729	21,009	22,703	20,383	19,409	21,103	0	42,112
1984	0	0	0	0	0	0	21,496	21,496
1985	386	0	2,425	12,947	10,908	13,333	0	13,333
1986	0	0	0	0	0	0	59,151	59,151
1987	114,473	114,473	114,473	0	0	0	0	114,473
1988	75,026	75,026	75,026	0	0	0	0	75,026
1990	8,866	6,661	17,781	43,247	34,332	45,452	0	52,113
1991	0	0	0	0	0	0	58,070	58,070
1992	114,346	111,848	116,332	13,713	11,727	16,211	0	128,059
1993	115,286	93,702	121,906	32,690	26,070	54,274	0	147,976
1994	5,957	0	13,295	22,092	14,754	28,049	0	28,049

Appendix G.4. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	2,634	2,180	3,445	4,123	3,312	4,577	0	6,757
1984	837	296	1,025	881	693	1,422	0	1,718
1985	0	0	0	0	0	0	10,039	10,039
1986	0	0	0	0	0	0	22,422	22,422
1987	22,194	22,194	22,194	0	0	0	0	22,194
1988	44,751	44,751	44,751	0	0	0	0	44,751
1990	0	0	3,324	8,680	5,356	8,680	0	8,680
1991	5,395	5,038	8,997	10,757	7,155	11,114	0	16,152
1992	32,271	31,163	34,880	12,190	9,581	13,298	0	44,461
1993	22,259	7,825	25,983	15,949	12,225	30,383	0	38,208
1994	447	0	3,161	9,176	6,462	9,623	0	9,623

Appendix G.5. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Karluk Sections (statistical areas 25510-25520), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	18,176	18,176
1985	91	0	110	471	452	562	0	562
1986	0	0	0	0	0	0	92,150	92,150
1987	1,439	0	1,502	11,385	11,322	12,824	0	12,824
1988	5,597	5,012	6,030	1,773	1,340	2,358	0	7,370
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	1,110	1,110	1,110	0	1,110
1993	31,653	31,653	31,653	25,134	25,134	25,134	0	56,787
1994	6,469	0	6,655	40,210	40,024	46,679	0	46,679

Appendix G.6. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Sturgeon and Halibut Bay Sections (statistical areas 25625-25640), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	21,889	21,889
1985	429	429	429	391	391	391	0	820
1986	0	0	0	0	0	0	77,894	77,894
1987	1,118	557	4,844	9,369	5,643	9,930	0	10,487
1988	94,124	70,093	102,959	93,106	84,271	117,137	0	187,230
1990	0	0	2,231	7,740	5,509	7,740	0	7,740
1991	65,366	19,883	88,669	116,697	93,394	162,180	0	182,063
1992	269,492	255,365	276,975	80,199	72,716	94,326	0	349,691
1993	11	11	11	0	0	0	0	11
1994	0	0	0	14,692	14,692	14,692	0	14,692

Appendix G.7. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Ayakulik Sections (statistical areas 25610-25620), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	64,880	0	72,950	134,662	126,592	199,542	0	199,542
1985	32,806	23,398	34,002	37,211	36,015	46,619	0	70,017
1986	46,978	0	48,619	23,100	21,459	70,078	0	70,078
1987	0	0	0	0	0	0	0	0
1988	2,267	2,109	2,268	1,074	1,073	1,232	0	3,341
1990	137,203	0	141,972	374,998	370,229	512,201	0	512,201
1991	84,495	0	101,302	223,271	206,464	307,766	0	307,766
1992	151,849	149,588	151,885	13,104	13,068	15,365	0	164,953
1993	0	0	0	0	0	0	0	0
1994	0	0	0	19,554	19,554	19,554	0	19,554

Appendix G.8. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Cape Alitak Section (statistical areas 25710-25720), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,375	600	5,500	26,024	21,899	26,799	0	27,399
1984	0	0	0	0	0	0	36,120	36,120
1985	4,347	183	4,691	16,377	16,033	20,541	0	20,724
1986	0	0	0	0	0	0	51,484	51,484
1987	31,298	30,841	33,907	7,339	4,730	7,796	0	38,637
1988	46,023	46,013	46,082	57,294	57,235	57,304	0	103,317
1990	0	0	18,185	132,489	114,304	132,489	0	132,489
1991	0	0	36,159	290,783	254,624	290,783	0	290,783
1992	59,064	51,711	60,849	40,015	38,230	47,368	0	99,079
1993	19,460	0	26,747	106,095	98,808	125,555	0	125,555
1994	0	0	10,514	133,924	123,410	133,924	0	133,924

Appendix G.9. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,097	920	1,104	6,137	6,130	6,314	0	7,234
1984	0	0	0	0	0	0	1,306	1,306
1985	2,138	1,447	2,158	2,765	2,745	3,456	0	4,903
1986	0	0	0	0	0	0	38,737	38,737
1987	9,197	9,197	9,276	1,046	967	1,046	0	10,243
1988	8,853	8,020	9,980	5,535	4,408	6,368	0	14,388
1990	2,794	2,794	2,794	3,145	3,145	3,145	0	5,939
1991	0	0	3,071	10,312	7,241	10,312	0	10,312
1992	10,933	10,933	10,933	0	0	0	0	10,933
1993	0	0	0	0	0	0	7,234	7,234
1994	2,397	0	6,130	21,887	18,154	24,284	0	24,284

Appendix G.10. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Seven River and Two-Headed Sections (statistical areas 25854-25890), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	2,265	2,265	2,265	0	2,265
1984	0	0	0	0	0	0	2,441	2,441
1985	0	0	0	3,048	3,048	3,048	0	3,048
1986	0	0	0	220	220	220	0	220
1987	706	706	706	1,395	1,395	1,395	0	2,101
1988	0	0	0	1,309	1,309	1,309	0	1,309
1990	530	375	772	757	515	912	0	1,287
1991	5,456	5,456	5,456	3,773	3,773	3,773	0	9,229
1992	48,101	47,668	48,776	4,453	3,778	4,886	0	52,554
1993	0	0	0	58,868	58,868	58,868	0	58,868
1994	4,201	0	4,335	23,398	23,264	27,599	0	27,599

Appendix G.11. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Sitkalidak Section (statistical areas 25810-25853), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	1,602	1,602	1,602	2,006	2,006	2,006	0	3,608
1984	0	0	0	0	0	0	1,851	1,851
1985	1,921	0	3,026	5,655	4,550	7,576	0	7,576
1986	0	0	0	11,643	11,643	11,643	0	11,643
1987	5,759	0	5,759	0	0	5,759	0	5,759
1988	45,597	44,852	45,684	3,558	3,471	4,303	0	49,155
1990	48,499	47,082	50,101	6,353	4,751	7,770	0	54,852
1991	0	0	0	0	0	0	174,666	174,666
1992	348,058	345,024	352,389	81,584	77,253	84,618	0	429,642
1993	56,539	34,584	72,524	56,667	40,682	78,622	0	113,206
1994	12,526	6,238	13,859	22,912	21,579	29,200	0	35,438

Appendix G.12. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Inner and Outer Ugak Bay Sections (statistical areas 25940-25942), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	4,137	4,137	4,137	0	4,137
1984	0	0	0	0	0	0	10,395	10,395
1985	0	0	0	0	0	0	1,372	1,372
1986	0	0	0	0	0	0	18,321	18,321
1987	0	0	0	3,327	3,327	3,327	0	3,327
1988	0	0	0	0	0	0	12,147	12,147
1990	4,521	382	5,507	7,354	6,368	11,493	0	11,875
1991	8,125	8,125	8,125	4,897	4,897	4,897	0	13,022
1992	44,401	38,054	56,019	28,643	17,025	34,990	0	73,044
1993	26,196	12,079	27,119	36,833	35,910	50,950	0	63,029
1994	3,089	2,805	3,344	10,048	9,793	10,332	0	13,137

Appendix G.13. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northeast Kodiak District (statistical areas 25910-25925), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	598	598	598	290	290	290	0	888
1984	0	0	0	662	662	662	0	662
1985	64	64	64	100	100	100	0	164
1986	0	0	0	125	125	125	0	125
1987	0	0	0	60	60	60	0	60
1988	226	226	226	37	37	37	0	263
1990	0	0	0	5	5	5	0	5
1991	0	0	0	0	0	0	13,804	13,804
1992	22,439	22,439	22,439	27,396	27,396	27,396	0	49,835
1993	3,095	3,095	3,095	3,540	3,540	3,540	0	6,635
1994	1,272	0	1,408	2,029	1,893	3,301	0	3,301

Appendix G.14. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	18	0	848	1,934	1,104	1,952	0	1,952
1984	0	0	0	2,585	2,585	2,585	0	2,585
1985	0	0	1,381	6,141	4,760	6,141	0	6,141
1986	11,449	11,251	11,609	419	259	617	0	11,868
1987	8,427	8,363	8,445	391	373	455	0	8,818
1988	14,254	12,753	14,447	2,666	2,473	4,167	0	16,920
1990	3,964	1,689	4,492	6,046	5,518	8,321	0	10,010
1991	0	0	898	8,115	7,217	8,115	0	8,115
1992	6,237	5,659	6,252	568	553	1,146	0	6,805
1993	4,879	1,492	4,891	1,266	1,254	4,653	0	6,145
1994	302	0	1,399	11,131	10,034	11,433	0	11,433

Appendix G.15. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Southeast Afognak Section (statistical areas 25233-25235), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	986	795	989	967	964	1,158	0	1,953
1984	387	183	391	690	686	894	0	1,077
1985	1,121	0	1,499	1,024	646	2,145	0	2,145
1986	2,716	2,716	2,716	0	0	0	0	2,716
1987	3,601	3,601	3,601	0	0	0	0	3,601
1988	281	266	288	130	123	145	0	411
1990	718	0	762	4,111	4,067	4,829	0	4,829
1991	970	0	973	6,467	6,464	7,437	0	7,437
1992	10,491	9,717	10,603	1,149	1,037	1,923	0	11,640
1993	5,207	4,366	5,356	2,720	2,571	3,561	0	7,927
1994	824	298	827	216	213	742	0	1,040

Appendix G.16. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Duck, Izhut and Kitoi Bay Sections (statistical areas 25230-25232), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	6,201	6,201	6,201	0	6,201
1984	334	130	375	1,253	1,212	1,457	0	1,587
1985	1,553	1,444	2,682	4,204	3,075	4,313	0	5,757
1986	237	237	237	0	0	0	0	237
1987	4,701	4,701	4,701	2,391	2,391	2,391	0	7,092
1988	2,846	2,846	2,846	442	442	442	0	3,288
1990	286	286	286	692	692	692	0	978
1991	1,156	1,107	1,217	2,348	2,287	2,397	0	3,504
1992	5,966	5,914	6,126	11,823	11,663	11,875	0	17,789
1993	3,945	227	4,077	14,760	14,628	18,478	0	18,705
1994	1,720	1,269	2,951	2,873	1,642	3,324	0	4,593

Appendix G.17. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Northeast Afognak and Perenosa Sections (statistical areas 25181-25220), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	42	26	42	41	41	57	0	83
1984	340	0	341	338	337	678	0	678
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	938	938
1987	0	0	79	119	40	119	0	119
1988	1,022	942	1,168	632	486	712	0	1,654
1990	8	0	33	72	47	80	0	80
1991	0	0	0	0	0	0	1,262	1,262
1992	4,526	4,526	4,526	2,836	2,836	2,836	0	7,362
1993	0	0	0	2,656	2,656	2,656	0	2,656
1994	0	0	0	0	0	0	1,392	1,392

Appendix G.18. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Big River, Hallo Bay, Inner and Outer Kukak Bay and Dakavak Bay Sections (statistical areas 26210-26255), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	297	297	297	2,518	2,518	2,518	0	2,815
1984	196	0	257	1,201	1,140	1,397	0	1,397
1985	3,796	3,558	4,721	3,623	2,698	3,861	0	7,419
1986	2,965	2,735	4,461	6,174	4,678	6,404	0	9,139
1987	4,901	4,674	6,542	5,318	3,677	5,545	0	10,219
1988	207,492	207,492	207,492	0	0	0	0	207,492
1990	43,610	40,992	46,216	8,947	6,341	11,565	0	52,557
1991	9,910	9,130	10,665	1,694	939	2,474	0	11,604
1992	118,175	118,175	118,175	0	0	0	0	118,175
1993	60,541	60,541	60,541	0	0	0	0	60,541
1994	31,421	31,421	31,421	2,431	2,431	2,431	0	33,852

Appendix G.19. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the seine fishery, July 6-25, within the Katmai and Alinchak Bay Sections (statistical areas 26260-26270), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	55	55
1985	0	0	0	16	16	16	0	16
1986	2,093	2,093	2,093	0	0	0	0	2,093
1987	0	0	0	0	0	0	15,824	15,824
1988	27,936	27,936	27,936	0	0	0	0	27,936
1990	10,706	10,706	10,706	12,570	12,570	12,570	0	23,276
1991	0	0	0	0	0	0	1,570	1,570
1992	67,671	67,671	67,671	30,380	30,380	30,380	0	98,051
1993	0	0	0	0	0	0	18,291	18,291
1994	22,627	22,627	22,627	15,316	15,316	15,316	0	37,943

Appendix G.20. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the set gillnet fishery, July 6-25, within the Central Section, north (statistical areas 25311-25335), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	3,205	0	18,716	39,151	23,640	42,356	0	42,356
1984	0	0	0	0	0	0	30,091	30,091
1985	0	0	0	0	0	0	23,544	23,544
1986	0	0	0	0	0	0	65,285	65,285
1987	23,848	21,986	26,378	14,698	12,168	16,560	0	38,546
1988	29,049	26,781	31,285	14,146	11,910	16,414	0	43,195
1990	10,475	7,425	22,649	42,262	30,088	45,312	0	52,737
1991	0	0	0	0	0	0	71,215	71,215
1992	32,384	31,013	33,271	17,670	16,783	19,041	0	50,054
1993	62,049	15,688	69,232	53,958	46,775	100,319	0	116,007
1994	5,877	0	12,180	32,871	26,568	38,748	0	38,748

Appendix G.21. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the set gillnet fishery, July 6-25, within the Central Section, south (statistical areas 25410-25440), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	28,899	27,077	34,161	18,147	12,885	19,969	0	47,046
1984	0	0	0	0	0	0	33,295	33,295
1985	0	0	0	0	0	0	25,272	25,272
1986	0	0	0	0	0	0	77,140	77,140
1987	12,540	9,473	15,436	13,849	10,953	16,916	0	26,389
1988	11,083	6,737	15,785	19,537	14,835	23,883	0	30,620
1990	0	0	9,616	44,905	35,289	44,905	0	44,905
1991	0	0	0	0	0	0	63,093	63,093
1992	19,514	17,923	20,410	11,166	10,270	12,757	0	30,680
1993	119,524	119,524	119,524	0	0	0	0	119,524
1994	11,623	2,334	17,100	23,659	18,182	32,948	0	35,282

Appendix G.22. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the set gillnet fishery, July 6-25, within the Moser Bay and Humpy-Deadman Sections (statistical areas 25741-25770), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	0	0	1,765	28,397	26,632	28,397	0	28,397
1984	0	0	0	0	0	0	48,998	48,998
1985	1,642	563	1,765	11,967	11,844	13,046	0	13,609
1986	0	0	0	0	0	0	50,260	50,260
1987	8,553	7,939	14,857	18,633	12,329	19,247	0	27,186
1988	16,019	6,963	35,700	80,589	60,908	89,645	0	96,608
1990	0	0	9,465	92,834	83,369	92,834	0	92,834
1991	0	0	0	0	0	0	131,006	131,006
1992	34,388	23,894	37,969	36,465	32,884	46,959	0	70,853
1993	0	0	3,466	89,095	85,629	89,095	0	89,095
1994	0	0	18,707	100,111	81,404	100,111	0	100,111

Appendix G.23. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the set gillnet fishery, July 6-25, within the Outer Akalura, Outer Upper Station, Dog Salmon Flats and Olga Bay Sections (statistical areas 25730-25740), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	923	0	3,053	16,354	14,224	17,277	0	17,277
1984	0	0	0	0	0	0	21,692	21,692
1985	603	0	1,205	11,471	10,869	12,074	0	12,074
1986	0	0	0	0	0	0	31,675	31,675
1987	3,008	0	5,005	11,671	9,674	14,679	0	14,679
1988	5,449	4,564	6,734	48,203	46,918	49,088	0	53,652
1990	0	0	0	20,676	20,676	20,676	0	20,676
1991	0	0	0	220,227	220,227	220,227	0	220,227
1992	2,551	390	3,396	11,830	10,985	13,991	0	14,381
1993	0	0	0	16,958	16,958	16,958	0	16,958
1994	0	0	0	30,953	30,953	30,953	0	30,953

Appendix G.24. Using a weighted average of the Chignik and UCI harvest, July 5- August 8, for the non-local average weight estimate; point, relative minimum and maximum estimates of non-local and local sockeye salmon, and unassessed and total sockeye harvest in number of fish in the set gillnet fishery, July 6-25, within the Central Section, east, and North Cape Section (statistical areas 25936-25939), 1983-1994, except 1989.

Year	Non-local			Local (Kodiak)			Unassessed	Total Catch
	Point	Relative Minimum	Relative Maximum	Point	Relative Minimum	Relative Maximum		
1983	346	331	420	1,988	1,914	2,003	0	2,334
1984	0	0	0	0	0	0	2,254	2,254
1985	975	142	1,286	1,326	1,015	2,159	0	2,301
1986	0	0	0	0	0	0	6,343	6,343
1987	3,517	3,517	3,517	0	0	0	0	3,517
1988	4,335	2,590	4,623	1,587	1,299	3,332	0	5,922
1990	1,564	804	2,271	2,871	2,164	3,631	0	4,435
1991	0	0	0	0	0	0	5,125	5,125
1992	9,366	8,746	9,424	1,825	1,767	2,445	0	11,191
1993	7,434	5,503	7,550	2,975	2,859	4,906	0	10,409
1994	0	0	0	0	0	0	2,864	2,864

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